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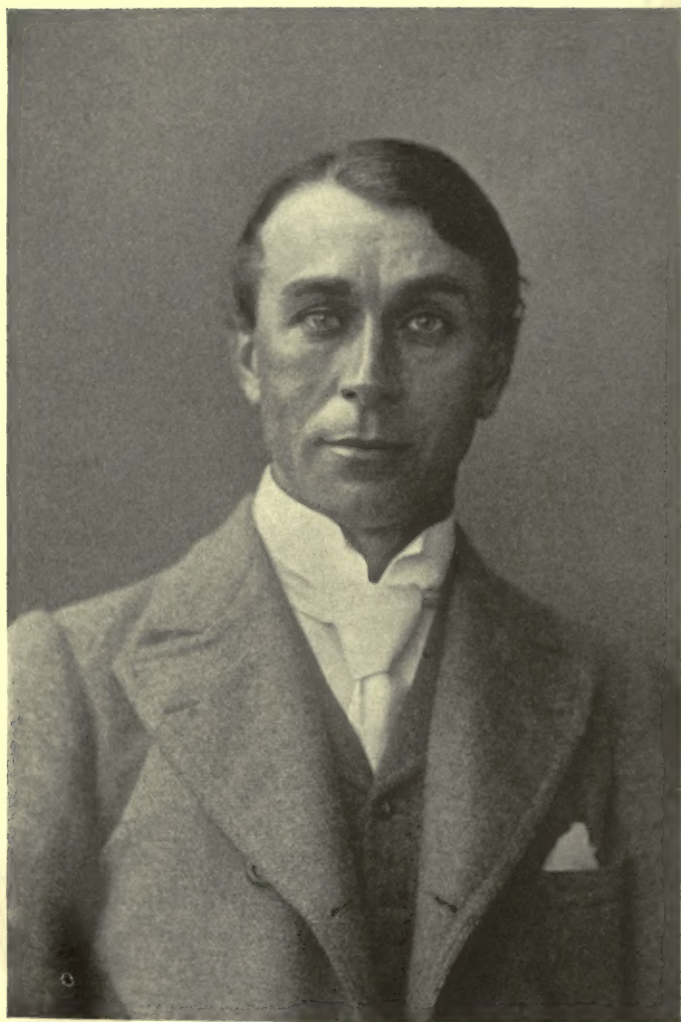
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JOHN VIRIAMU JONES

September, 1890.

JOHN VIRIAMU JONES

AND OTHER

OXFORD MEMORIES

BY

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TO

MY DEAR FRIEND

ELLEN MONTAGUE BARRY

IN REMEMBRANCE OF 1879

PREFACE

IT is not an easy task to write the story of the chief interests and activities of forty years ago—of life as it was then lived. The account first written must be sifted and re-sifted and examined from every point of view. It should be laid aside for long periods and looked at again with vision and imagination freshened and restored. Statements of fact which seem to the writer to be beyond suspicion or doubt must still be confirmed by reference to every available source of information. Above all, if the record is to be of value, its preparation requires the combination and the careful comparison of the impressions and memories of many men; requires too, if that most difficult of attainments, accuracy, is to be approached, the searching and critical inspection of many eyes. It is a great pleasure, as well as a duty, gratefully to acknowledge all the kindness which has helped me to reach the level of accuracy—such as it is—to be found in the following pages.

The whole or nearly the whole of the proofs or manuscript has been read by four kind friends—Mrs. E. M. Barry, Dr. A. G. Vernon Harcourt, F.R.S., the Rev. R. D. Pierpoint, and Mr. Roland Trimen, F.R.S. I thank them warmly for help in the correction of errors and for other improvements which their critical

experience has led them to suggest. To Mr. Trimen I am also indebted for the amusing reminiscence of Willemoes-Suhm in the first chapter.

It is impossible adequately to acknowledge all that I owe to Viriamu's sister, Mrs. S. Home. How large a part of the book is really hers will be inferred by the reader who turns over the pages of the first five chapters, especially those of I and IV, or consults the references under Mrs. Home's name in the Index. But this is by no means all; for her memories of the past have inspired and stimulated mine, even as mine, I am glad to know, have brought fresh gleams of light to her. The whole work has been submitted to Mrs. Home, every difficulty discussed with her, and throughout I have been helped and encouraged by her sure literary instinct and unfailing sympathy.

Mr. S. Home has also taken a warm interest in the work and has written for it the history of the youth of Thomas Jones, Viriamu's father, at the beginning of Chapter I, together with the account of the Swansea Literary Society in Chapter IV. The recovery of the manuscript of the essay on 'Ulalume' is also due to Mr. Home's kind efforts.

The manuscript and proof-sheets have been read by Viriamu's brothers—Sir David Brynmor-Jones, K.C., M.P., and Mr. Leif Jones, M.P., who have made many valuable suggestions. Furthermore, Sir David has himself written the account of Viriamu's labours on behalf of Welsh education incorporated in Chapter V, and has introduced modifications into the sketch of his father's

youth on pages 5-7, changes which emphasize the fact that Thomas Jones the Poet-Preacher, like so many other illustrious Welshmen, came from rural Wales and from intimate association with the life of the farm.

Mrs. Viriamu Jones has afforded me valuable information on many points, and several important links were recovered from correspondence and other papers most kindly lent to me by her.

I venture to hope that Viriamu's youth and the scene of Oxford life in the Seventies and earliest Eighties, which forms its setting, have been truthfully pictured. If only the representation be true, I have gained the beginning and the end of my desire. The fresh and vivid beauty of youth is all its own. It speaks for itself and is not to be heightened by literary subtlety or elaborate embellishment.

The first half of the book has been submitted to four of Viriamu's most intimate Balliol friends, Professor C. H. Firth, Professor W. P. Ker, Sir Harry Reichel, and Professor C. E. Vaughan, and all these men of trained and critical judgement have encouraged me to hope that the pages give a true picture of the life they knew so well. Not only have they afforded me the greatest pleasure and encouragement by their kindly sympathy, but they have also suggested many improvements and enabled me to add many memories.

I have furthermore been encouraged by the sympathy of two other Balliol men who have read the first five chapters, Mr. A. L. Smith who took his M.A., and Mr. P. E. Matheson who entered the College, in 1877—Viriamu's second year. These chapters have also been

kindly read by Mrs. Matheson, who knew Viriamu well in the Cardiff period of his life.

I cannot sufficiently express my thanks to Sir Isambard Owen for the admirable account of the absolutely essential part taken by Viriamu in the foundation, and in guidance during the critical earliest years, of the University of Wales. My only regret is that it was impossible to introduce this important episode in the history of Welsh education in its proper place in the volume, instead of being compelled to print it as one of the Appendices (III).

The Council of the Royal Society kindly allowed me to reprint from the Year-Book the late Sir William Huggins's brief sketch of Viriamu's life. Messrs. Macmillan permitted the reproduction in Chapter X of two articles contributed by the author to *Nature*.

In the chapters on the Union I have received much kind help from men who took part in the debates and the administration of the Society in the Seventies—from Mr. A. A. Baumann, Rev. F. R. Burrows, Lord Curzon, Mr. M. H. Gould, and Lord Milner. Dr. Dixey also kindly recalled several incidents recorded in these chapters, as well as that forming the subject of Appendix IV. In my frequent visits for the purpose of consulting the Minute-books I have always received the most courteous assistance from Mr. W. Gill, the Steward of the Society, and in many visits to the Library from the Library clerk.

The account of the late Professor Rolleston has been submitted to his son Dr. H. D. Rolleston, his senior

demonstrator Dr. W. Hatchett Jackson, the Radcliffe Librarian, and his old friend Dr. A. G. Vernon Harcourt, F.R.S. Many changes and additions have been made in consequence of the kind suggestions which were received.

On special points which arose in the course of the work I have appealed to my friends Mr. F. Madan and Mr. R. L. Poole. Mrs. Margaret L. Woods has read the proofs of Appendix II on the 'Signal-elm' in 'Thyrsis' and has expressed her full agreement with the conclusion arrived at therein. Other generous assistance is acknowledged in the text.

The able and sympathetic assistance that has been so freely rendered must not be allowed to diminish my responsibility in the smallest degree. This I share with none, but claim the whole of it for any and every detail that the reader may feel inclined to criticize.

In these days when books are so often printed on what may be described as fine sawdust, and their illustrations upon a surface of china clay, the author who desires to use real paper is likely to have a hard time. My task in securing good material has been made easy by the skilled advice of Mr. Horace Hart, Controller of the Oxford University Press, upon whom I have also relied in deciding all questions that arose concerning the type. From him and those members of the staff of the Oxford Press with whom I have been brought into contact, I have always received the most courteous

consideration—so much so indeed that the printing of the book has not been a troublesome piece of work but a pleasant one. Messrs. Witherby have shown in the illustrations that it is quite possible to print satisfactorily from half-tone blocks on a smooth surface of true paper, a surface without the glaring polish of the heavy clay-loaded material—miscalled ‘art’ paper—that is ordinarily employed.

The binding of the book has been chosen in honour of the beloved native land to which Viriamu gave the years of his mature and ripened experience ; in honour, too, of that dear home of my youth, the College within whose walls I fell with a glad surprise into the happy dream of Oxford life. For the colours of both Jesus College and the beautiful land which it represents in Oxford are green and white—symbolic of youth and of Spring. And the spirit of youth and of Spring has come back to me from the past as I have been writing. May the reader feel the bright presence that has inspired the work, and will live on, the cheering companion of other work in other days. If the hope be vain I know only too well where the cause of failure lies. It is in him who has tried but failed to interpret all the beauty and the charm that have been brought to him on the wings of memory.

EDWARD B. POULTON.

OXFORD,
Jan. 1, 1911.

CONTENTS

	PAGE
JOHN VIRIAMU JONES. CHAPTERS I—V	
SLIGHT SKETCH OF THE LIFE OF JOHN VIRIAMU JONES.	
By the late Sir William Huggins, P.R.S., O.M., K.C.B., D.C.L., LL.D.	3
CHAPTER I. JOHN VIRIAMU JONES. SWANSEA, READ- ING, LONDON: 1856—1876	
II. OXFORD LIFE: 1876—1881	32
III. OXFORD LIFE (<i>continued</i>).	60
IV. LITERARY INTERESTS AND ENDEAVOURS: 1876—1881	85
V. SHEFFIELD, 1881—1883; CARDIFF, 1883— 1901	110
—————	
VI. MEMORIES OF THE UNION IN THE SEVEN- TIES	135
VII. MEMORIES OF THE UNION IN THE SEVEN- TIES. PERSONAL EXPERIENCES	167
VIII. GEORGE ROLLESTON, LINACRE PROFESSOR OF HUMAN AND COMPARATIVE ANATOMY AND PHYSIOLOGY AT OXFORD, 1860— 1881	183
IX. MANY MEMORIES	221
X. OXFORD REFORM AND THE BRITISH EX- AMINATION SYSTEM	257

	PAGE
APPENDIX I. SOME BALLIOL MEN IN RESIDENCE WITH JOHN VIRIAMU JONES	281
II. THE 'SIGNAL-ELM' IN 'THYRSIS'	291
III. JOHN VIRIAMU JONES AND THE UNIVER- SITY OF WALES. By Sir Isambard Owen, D.C.L., M.D., Vice-Chancellor of the University of Bristol	302
IV. AN ARTICLE IN 'VANITY FAIR' AND ITS SEQUEL IN 'PRIVATE BUSINESS' AT THE UNION ON FEB. 25, 1875	313
V. THE LIFE-HISTORY OF THE LIVER-FLUKE, THE CAUSE OF 'ROT' IN SHEEP.	315
INDEX	323

ILLUSTRATIONS

- John Viriamu Jones: September 1890. From
an untouched negative by Norman May &
Co., Limited *Frontispiece*
- 'The Ten St. Giles': Summer Term, 1880 . *Facing p. 73*
- The Standing Committee of the Union: Lent
Term, 1879 *Facing p. 167*
- George Rolleston. From a drawing by W. E.
Miller, 1877 *Facing p. 183*
- The making of the Ruskin Road at North
Hinksey: Summer of 1874. From a photo-
graph by Messrs. H. W. Taunt & Co., Ox-
ford *Facing p. 246*

CHAPTERS I—V
JOHN VIRIAMU JONES

JOHN VIRIAMU JONES

THE DEAREST OF ALL THE DEAR FRIENDS
GIVEN TO ME BY OXFORD

As sometimes in a dead man's face,
To those that watch it more and more,
A likeness, hardly seen before,
Comes out—to some one of his race :

So, dearest, now thy brows are cold,
I see thee what thou art, and know
Thy likeness to the wise below,
Thy kindred with the great of old.

A SLIGHT SKETCH OF THE LIFE OF JOHN VIRIAMU JONES

BY THE LATE SIR WILLIAM HUGGINS, P.R.S., O.M.,
K.C.B., D.C.L., LL.D. *From The President's Anniversary
Address read to the Royal Society of London, on St. Andrew's
Day, Nov. 30, 1901.*

ONCE again the Fates cut the thread of a life prematurely, and a man great in promise and great in his power of inspiring others has fallen. Viriamu Jones, Principal of the University College of South Wales, possessed of great natural powers, a man of high ideals, charming in his personality, inheriting much grace of diction, almost irresistible in his persuasiveness, in a true sense lived a long life, though he died at the early age of forty-five. His successes began early; at sixteen he won a scholarship in Geology¹; prizes, medals, and other scholarships followed during his studentship at University College, London; and at nineteen he took his degree with first-class honours. At Oxford, having obtained high honours in mathematics, and in the Natural Science School, he was elected Principal and Professor of Mathematics and Physics in Firth College, Sheffield. Two years later, at the early age of twenty-seven, he was chosen, over many older candidates, to the responsible post of the First Principalship of the University College of South Wales. Deep, as it may well be, is the gratitude of the College and of Wales to their first principal. Chiefly through his efforts and power of persuasion, £70,000

¹ This statement is not quite correct. For an account of his London career see pp. 26-9 of the present work.

for the building of the new College, as well as a free site, were obtained.

His scientific work was mainly in electrical science, particularly in connection with Electrical Standards. In 1897 he worked out a simplification of his former methods and a more general solution of the problem discussed by him in 1888 of the mutual induction of a circle and a coaxial helix. The results are contained in a paper read before the Society in that year. He was a man of wide sympathies; he occupied many of his hours of relaxation from scientific work in studying the poetry of Robert Browning, who had been, at one time, an attentive listener in his father's congregation. His father was a man of rare gifts and eloquence, who was known as the Poet-Preacher of Wales.—*Year-Book of the Royal Society*, 1902, pp. 188, 189.

CHAPTER I

JOHN VIRIAMU JONES

SWANSEA, READING, LONDON: 1856-1876

JOHN VIRIAMU JONES was born at Pentrepoeth, near Swansea, January 2, 1856. He was named after John Williams of Erromango, 'Viriamu' being the native attempt to pronounce the missionary's name. By his family and most intimate friends he was called 'Vir', pronounced 'Vere'. His Balliol friends spoke of him as 'J.V.' He was the third child and second son of the Rev. Thomas Jones, known as the 'Poet-Preacher' of Wales, a man whose wonderful life—unfortunately still unwritten¹—would even now, nearly thirty years after his death, be received with warmth and enthusiasm, especially in his beloved native land.

Thomas Jones was born at Rhayader, July 17, 1819, the son of Evan Jones of that little town, a commercial traveller in the woollen trade, himself the son of Griffith Jones, a tenant-farmer of Cae-newydd near Rhayader, who came of a yeoman family which had been settled for a long time at Llandderw in Radnorshire.

Mr. S. Home has kindly written the following brief history of the youth of Thomas Jones:—

His own account, as given to his daughter [Mrs. Home] was that, when he was a very little boy, his grandfather took him one morning to the top of a hill at Rhayader, and solemnly prayed for him—that he might grow up to

¹ A short account will be found in the *Dict. of Nat. Biog.*, and a brief biographical sketch was published by his widow in the introductory pages of *Lyric Thoughts of the late Thomas Jones, the Poet-Preacher*, London, 1886.

be a good man and always do God's will to the best of his ability. Then he told him that nothing else in the world was worth striving for, oneness with the Divine Spirit being the great secret of life. The impression thus made upon the imaginative responsive boy was ineffaceable: it marked an epoch which he ever loved to recall.

Both his parents died when he was very young, and he was then brought up by his grandfather. He attended a school at Rhayader till he was over twelve when he was apprenticed to and went to reside with Mr. Winstone, a cloth-weaver at Llanwrtyd. Alone for the first time with utter strangers, he sat down on the ground in the sad, still twilight and, in his own words, 'wept his heart out.' Then, outworn with grief, he lifted his eyes to the encircling mountains, and felt suddenly soothed by the thought that some day he might climb over them and be free.

A few years later, having spent his Sundays at the Welsh Chapel and Sunday School, and read books given to him by the minister, he left his beloved hills and tramped to Llanelly, then as now a centre of Welsh industry. Here he supported himself for two years as a collier, and spent nearly all his earnings in buying books. He was a great reader and already ambitious of qualifying himself for the ministry.

His oratorical gifts impelled him sometimes to hazard a dinner-hour address to his fellow-workmen. On one of these occasions he was interrupted by jeers, whereupon the preacher descended from his rostrum, and challenged the offender to fight, the result being to ensure a respectful hearing for the future.

He attracted the attention of the Rev. David Rees of Capel Als, Llanelly, one of the leading Independent Ministers of South Wales, under whose guidance a small private seminary for the training of students for the ministry was carried on. Befriended by Mr. Rees he was received as a student into this institution in 1840, and after four years' instruction, during which in

due course he began itinerant preaching in the districts round Llanelly, he was ordained minister of Bryn Chapel in that town in 1844.

The great orator, whose youth has been sketched in the preceding paragraphs, was ordained as an Independent minister at the age of twenty-five, became Chairman of the Congregational Union of England and Wales (1871-2), and during the years of his London pastorate (1858-69) made Bedford Chapel (1861-9) a centre of spiritual and intellectual life.

Robert Browning, himself a member of the congregation, wrote an Introduction to a volume of the Poet-Preacher's sermons, published after his death.¹ I quote from it the following impressions of the great poet and thinker:—

I should think it impossible that such an outpour of impetuous eloquence could lie quietly condensed by the limitations of the ordinarily accepted sermon—its regular beginning, middle, and end. Indeed, as often as not, when the scheme of the projected discourse had been stated with due precision, its merely introductory portion would in delivery not merely grow alive but expand with ever fresh and fresh accretions of fact and fancy, old analogy and modern instance, till the orator (as those gone-by divines have it) *sermocinando ultra clepsydrum*, 'would exceed his hour-glass', to the dissatisfaction of nobody. Yet I was told at the time that this manager of fluent English—copious, varied, wanting in neither imagery nor colour—had acquired when adult such mastery over an absolutely foreign language. Some of the incitements to discursiveness might arise from a facile promptitude in finding illustrations of whatever

¹ *The Divine Order and other Sermons*. Edited by Brynmor Jones, 1884.

was the subject under treatment in occurrences of the actual day and hour, political or social. I remember that Thackeray's funeral, with circumstances attending it that had been mentioned in a weekly paper issued the evening before, was made to exemplify some point of doctrine which it very profitably involved and absorbed altogether. This much is said in order to prepare myself rather than the reader for a possible disappointment; the matter, the graver substratum of the sermon, will undoubtedly remain for judgment, and may fearlessly accept it; but the bright and glancing surface manner, the thorough earnestness, a sensibility quivering through that rich and flexible voice, and an illumination of intellect in every expressive feature—these must needs be taken on trust; and I should be hardly faithful to mine if I hesitated so far to bear witness. But it was not eloquence alone which attracted you to Bedford Chapel; the liberal humanity of the religionist to be heard there acknowledged an advocate wherever his quick sense could detect one, however unconscious that his sayings might be pressed into the service; and Tennyson, with Matthew Arnold, Ruskin, and Carlyle, would find themselves claimed as the most energetic of helpers when they least expected it. Indeed, it was a fancy of mine that, in certain respects and under certain moods, a younger Carlyle might, sharing the same convictions, have spoken so, even have looked so; but the clear-cut Celtic features, the lips compressed as with the retention of a discovered prize in thought or feeling, the triumph of the eyes, brimful of conviction and confidence—these, no less than the fervency of faith and hope, were the orator's own.

The following account kindly written for me by Mrs. S. Home, Vir's sister, clearly shows that the Poet-Preacher's first wife was a remarkable woman, and that her six children were likely to be the inheritors

of power from both parents, and to be swayed by the powerful influence of both :—

My mother, Jane Jones, was born at Dowlais, a village near Merthyr, in the year 1822. I know nothing of her mother's family except that they were old inhabitants of Dowlais, that her mother married, at a very early age, a son of John Jones of Morrision, and that, a month before her child was born, her youthful husband met with a fatal accident when sliding on an ice-covered pond. When the baby came, her husband's brother, David Jones, went to her, and took her, when she was fit to travel, to his home at Morrision, near Swansea, where he and his wife lived with his father. After two years the young widow married again an Independent minister named Roberts, who had a chapel at Dowlais. He was a handsome, able, and kindly man. I can recall him as a very old man, upright in carriage, with piercing eyes which twinkled humorously.

By this time the child was so endeared to her grandfather and uncle that they begged to keep her altogether, and it was arranged for the little Jane to be her uncle's adopted daughter, to be taught to call him 'father' and be his entirely.

In due course her mother gave birth to six children, but always kept in touch with the eldest daughter, who visited the home at Dowlais from time to time, so that my mother felt quite one of them, and the word 'half-sister' never came in. She was made to feel inevitably of more consequence in their little world; for her 'father' at Morrision was well off, giving her the best education which could be had, and showering nice clothes upon his idol and granting her every whim. Her grandfather died when she was about ten, and she missed her playfellow from the chimney-corner, and wept over the empty chair. She grew up to be a self-reliant young girl, serious and thoughtful; and managed the home with ability and tact, good temper and kindli-

ness. She gradually became the leading spirit in Libanus Chapel (Independent denomination), where her 'father' was an elder of the church, and she mothered the Sunday School children, and advised the mothers, who came to consult her about their upbringing.

She was sought in marriage many times, but always said 'No'. When she was well over twenty-five the old minister of the chapel died, and the deacons invited various young preachers to come on trial, just as is described by Barrie in *The Little Minister*. Among them was Thomas Jones, whose renown was even then spread through Wales, and romantic stories of his tour from North to South, rousing every torpid village with stirring eloquence, riding on his pony 'Bess' over the hills and through the valleys in the enthusiasm of his mission, were well known to my mother. He came, saw, and conquered more than the deacons and the congregation,—my mother's heart. He accepted the ministry of Libanus, and married my mother about a year afterwards. It was no wonder that she took him: he was a striking personality. To daring, impetuosity, originality, and a rich, powerful voice which could ring through the chapel like a clarion or sink into the softest music a mother makes crooning over her babe, were united a beautiful physique, classical features, eyes 'deeply, darkly, beautifully blue', elasticity of movement in a well-knit nervous frame.

My mother was about five feet four in height, slender and light of foot—features not quite regular, wise, kind though critical—eyes whose colour I cannot recall—a firm mouth and chin and clear, pale complexion.

My father would put sermons into the fire if she did not like them, and went to his study meekly at her bidding to write revised editions. She always knew her own mind and did whatever she thought it right to do, undeterred by persuasion or any obstacle. Nothing could unbalance or flurry her. Once, when a servant fell downstairs, and my father, in great agitation, was

rushing for a doctor, she said quietly, 'Let me see first whether she is really hurt,' and proceeded to feel limbs and head.

It was so always. Through the dazzling excitement of his career at Bedford Chapel, London, where the place was crammed from gallery to floor and people sat all up the pulpit stairs and stood in the aisles, she was self-possessed and dignified, receiving compliments with reserve, as if she were weighing the giver of them and measuring the truth of their utterances. She had an unerring instinct for values: the friends she made were the best intellectually and the most cultivated socially of the hundreds of her acquaintances. She was eager to help the struggling young men and women who came to the church—got at them and made them feel that she understood their temptations in the great whirlpool of London, invited them to her house and listened to the story of their lives. I met many of them after her death, who paid tribute of tears to her memory. Hers was a growing soul, such as Meredith loved to depict.

When she fell into the last sleep, after years of weakness and pain, it was with one gentle sigh that she gave up the spirit that had been a clear flame for the past weeks. She bade us good-bye ten minutes before, six of us, told each one who was old enough to understand the fault most of all to be guarded against, simply caressed the babies, then turned to papa, who was kneeling by her bed, and clasped him in her arms until they relaxed in death.

I remember that Robert Browning came into the vestry after the service, the week after my mother's funeral, put both arms round papa, and, with tears in his eyes, spoke a few strong words of sympathy and understanding.

I think such a mother must have had great influence on Vir's character. Some thinkers consider that from our very birth the blank sheet of the brain is written upon in indelible ink (here I am quite out of my depth), that directing tendencies and impulses are given and fixed

from the earliest moment,—the deepest impressions made before consciousness comes ; but to my ignorance this plunges us into the deep question of heredity, and transmitted qualities, and the problem whether the sheet is indeed a blank, or crowded with the hieroglyphics of past generations.

Vir and I once spent a summer's day in the garden here discussing the rival theories on this point, or rather he discoursed and balanced one against the other, holding a brief for and against each in turn. I remember Vir saying, as if to himself, 'Can acquired characteristics be transmitted? Given a child from birth, transplant it from a cottage to a palace—will the peasant child be absolutely the creature of his environment, except for some physical resemblance to the parents?'

The problem as thus stated omits an essential thought. That 'physical resemblance to the parents' would include hereditary faculty and power of every kind. Surroundings only determine the use to which the weapon will be put,—of high importance without doubt, but no justification for so strong an expression as 'the creature of his environment'.

These considerations are not out of place in attempting to estimate the intellectual equipment with which Vir started the race of life. The theory of heredity, generally although by no means universally received at the present day, would attribute his power and his success to the fact that his parents were what they were, far more than to the influences which they brought to bear upon him. The distinction of the hereditary equipment would, without these influences, have ensured a distinguished career : parental solicitude and wisdom at their very highest might make a worthy citizen but could never give an edge to a weapon that was dull by nature.

When a man chooses his wife, when a woman chooses her husband, he and she take the one irrevocable step that, far more than any others they may take hereafter, will decide, for good or for evil, for success or for failure, the destiny of their children.

I wish to guard against misconception. I have tried to weigh against each other the two mighty sets of causes which together control the destiny of every human life. I have concluded that the hereditary material is weightier than the influence of surroundings, the 'inherent' equipment than the 'acquired' training which is bestowed upon it. But this conclusion is no justification for the criminal folly of neglecting the environment of the developing individual. Even if one set of causes be less weighty than the other, it is still hardly possible to over-estimate its importance. Furthermore, the responsibility for the inherent equipment of offspring ends with the choice of a mate: responsibility for making the best of the equipment endures through the whole period of intellectual growth. And this responsibility is heaviest when the quality is highest: only the finest steel can take the keenest edge, but the edge cannot be given except by unceasing care and skill.

We may confidently believe that John Viriamu Jones would under any circumstances have achieved success, but we may be equally sure that the great work to which he was called needed for its performance not only a weapon of the highest quality, but one fashioned by the unceasing love and patience of parents who were great and wise and tender,—fashioned too by a remarkable educational career. In the next and in later chapters

I attempt to sketch some aspects of the most powerful element in this career,—subtle influences of infinite variety that are brought to bear on a young man at one of our ancient Universities, with the unique and inestimable advantage of residence as it is there conceived; not a mere lodging within the limits of a single town or city, but a life in common with others of the same age in homes of matchless beauty and historic interest unsurpassed.

The first of the following memories of Vir's childhood, recalled by his sister, brings before us one of the methods adopted by his father:—

From babyhood Vir sturdily protested against things he did not like, until he was reasoned with in more ways than one,—oftenest 'at the Grecian portico of a boy' as Dr. Middleton says in *The Egoist*. His father made many doggerel verses on this trait to amuse us in the evenings. They began—

There was a small boy called Viriamu Jones
Who always said 'No, no, no'.

To this beginning every evening would bring a new ending, such as,—

After a while he came back with a smile
And said 'Why yes, it is so, so, so'.

And again—

One very dark night there came to the door
An ugly, black Bicky Bo¹:
This time it was well that Viriamu said
His usual 'No, no, no'.

¹ My kind friends Sir John Rhys and Sir James Murray inform me that 'Bicky Bo' is a form of 'Buggy Boo', well known in many counties of England and in America as a nursery name for a hobgoblin. The Cardiganshire form is 'Bwci Bo', pronounced Boocky Boh. In the Welsh form the English 'gg' always becomes 'ck' and the second word always 'Bo'.

This taught us as small children that after all there were times when 'no' was right, and we learned in this way to discriminate resistance to legitimate authority and rejection of the suggestions of the Powers of Darkness. Thus, at the time when powders were administered to us in jam, my father sowed seeds of wisdom in jingling nonsense sweet to the infant ear. He could measure, with unerring insight, the level reached at each successive stage of intellectual growth, and thus gained his wonderful power of meeting the individual needs of man, woman, and child.

There may be those who look on such stories of childhood as trivial, and would deny them a place in this brief history of a life. Such criticism is mistaken. Until I read these memories I had omitted to record one of the most striking and charming characteristics of my most intimate friend. And now I wonder how it was possible that it could have been overlooked.

I never met any man so fond of discussion as Vir—so determined, so full of resource in attack and in defence. But at the very end,—for even the longest and most exciting discussion must have an end—he would always with a winning smile agree, 'Why yes, it is so,' or at the least would admit some weakness in his own defence or strength in his friend's attack.

This characteristic—most evident to all Vir's friends,—was clearly present in his childhood, an inherent part of his intellectual equipment which, under the most favourable conditions, attained the fullest possible growth and maturity.

The most complete results will ever be attained when there is harmony and co-operation between the two great

sets of forces by which life is moulded,—when inherent tendency is fostered by special and carefully chosen education. And the most favourable of all environments is that which may be created by a parent who has the insight to detect his own full-grown faculties budding in the brain of his child.

I return to Mrs. Home's memories of Vir's childhood:—

When we lived at Albert Street, Regent's Park, George Macdonald, whose house was lower down on the other side, told my father an amusing story of Vir. One day he saw him, then a small boy of five or six, come out of the house of the lady to whom we children went every day for a reading lesson, then go boldly up to a man who was leading a donkey, and hold an earnest conversation with him. The next moment Vir was seated on the creature's back, riding proudly up the street. Fearing he might be stolen, Mr. Macdonald watched until Vir dismounted at his father's door. When questioned afterwards he said, 'I gave him my penny.' It was his weekly pocket-money: the days of spoiling children had not come!

I cannot date the following episode, but we must have been very young. Vir and I were walking to school together, when a tall butcher-lad remarked *en passant*, 'What a funny little girl—she laughs all over her face.' Vir flew at him, hammered his knees with clenched fists, crying out, 'How dare you speak so of my sister?' 'And a funny little boy, too,' the enemy sang out, as I drew Vir away, pale with rage and calling passionately, 'He is a coward: he won't fight me.'

It is hardly possible to exaggerate the value of Vir's happy comradeship with his family—with his elder

brother and sister,—Brynmor¹ and Annie,² and his three younger brothers,—Irvonwy,³ Leif,⁴ and Morlais.⁵

Mrs. Home says of the influence of Vir's elder brother,—

Brynmor, being four years older, at one time undoubtedly swayed Vir, and roused his interest in the possibilities of life. It is not easy to bring back his stirring and eager, swift monologues at night, when our elders supposed that we were sleeping.

The following graphic description of a day in 1886 suggests the extent to which the elder brother had, at a much earlier period, acted as a powerful stimulus in the development of the younger :—

I remember a day at 23 De Vere Gardens, Kensington, where Brynmor lived when he was County Court Judge and I kept house for him. Vir was staying with us. He and Brynmor hit upon some philosophical subject at breakfast—they argued until the luncheon gong sounded, kept it up throughout the meal, oblivious of the food set before them, then retreated to the library in haste, whence earnest voices proceeded all the afternoon. During tea-time they talked on, fresh as ever, and I had to interrupt them when the dinner hour approached, to remind them of guests who were coming. As I heard voices long after I had retired for the night, it is probable

¹ Sir David Brynmor-Jones, K.C., M.P. for Swansea District since 1895.

² Married (1) Robert Maine; (2) S. Home, LL.B., District Registrar of the High Court of Justice, Swansea.

³ Drowned in Swansea Bay, August 20, 1886. He was called 'Mon.' by his family, a modification of the second syllable of his name.

⁴ Leifchild Stratten, M.P. for North Westmoreland, 1905-10; Rushcliffe, 1910. President of the United Kingdom Alliance.

⁵ Morlais Glasfryn, died 1905.

that the game went on into the early hours, neither being able to cry 'checkmate'. But they were enjoying themselves, and it is much to have an entirely happy day in this 'beautiful, sad world'. (See also p. 31.)

The distinguished career of Vir's two living brothers is of course well known, and Irvonwy in his short life had shown that he possessed poetic gifts. In order to complete the picture of the five brothers, a sketch of the youngest has been kindly drawn for me by Mrs. Home.

Morlais was always full of verve, energy, force,—a very strong personality. He did not like books, was always in action. He was an engineer, finally an electrical engineer. He went through the usual course, first learning everything like a workman. He was idolized by the men: he wore clothes like theirs—rose at six and came home fagged out in the evening. After dinner he used to fall asleep. When he was working on the Manchester Ship Canal, in its beginnings, his men once refused to start an engine, saying that it was dangerous. He sprang on to the footplate, turned on steam and reached the top of the newly made incline in triumph. There was never any doubt about immediate obedience after that.

He was successful in business, making money quickly which he freely spent. 'His word was his bond.' He knew no hesitations or vacillations but went straight ahead to his objective, turning neither to right nor left. He was quick-tempered but generous and forgiving and affectionate.

It is much to be able to say of a man, as may be truly said of him, that he was absolutely to be depended on in all things.

There was a deep and tender sympathy between Vir and his only sister. 'I can quite understand a man

being in love with his sister,' he once said to me ; and, in criticism of a friend whom he knew intimately, he said, 'I never knew any one to whom his sisters appealed so little, as women.'

'I had much of Vir's confidence always,' Mrs. Home wrote, April 25, 1910. 'He used to say, "I want your opinion, because you see far and you judge well." He idealized thus those whom he loved, and was ever chivalrous to women.'

This brotherly and sisterly intimacy was one of the great forces under which Vir's intellectual growth took place. To be believed in is itself a mighty power for all that is strong and noble,—doubly so to be believed in by one of great gifts. We can well imagine how splendid a thing it was for Vir, in the years between his mother's death in 1868 and his happy marriage in 1882, to come under the loving influence of a gifted sister who fully realized and admired his powers. It will be shown in later pages that they corresponded continually on all subjects, especially literature, but each writer knew full well that every experience was a keen delight to the other. And from the sister's letters preserved by the brother, the brother's by the sister, much light has been thrown where all would have been dark.

Vir kept all her letters, even one telling of triumph at the Swansea Literary Society¹—a double triumph of mind and dress, or shall I follow the precedence adopted by the writer and say dress and mind?—a letter that he was exhorted to destroy! I mention this, although some might consider it trivial, together with words written

¹ See p. 94.

February 10, 1876, when Vir had just gone up to Balliol for his first term,—

I shall wear your colours this year, though they are shockingly unbecoming to me. Can your masculine mind appreciate such marvellous self-denial?

I allude to these letters because they show that the influence on Vir was broad and many-sided, embracing the gaiety and recreative brightness that may be found on the surface of life, as well as the deeper thoughts and feelings.

Not only was Vir's intellectual growth moulded by the force that springs—all unconsciously—from the brotherly and sisterly relationship at its highest: there was also companionship in deliberate endeavour. Together they wrote for the Swansea Literary Society, and thus with mutual help and sympathy their earliest literary efforts were begun.

Reflecting on the wonderful piece of family history which made Viriamu's life possible, we are led to conclude that he owed much to the fact that he was a son of Wales, and that there was poetic justice in the great and enduring work which he achieved for his native land.

Speaking of the onward march of families Mrs. Home wrote, July 27, 1910:—

In Wales the line of advance is a thirst for knowledge. Her humble students will starve to buy books—they long for 'the things of the Spirit not the things of the flesh'. When at last they gain both, there is probably some falling off and weakening of moral fibre,—and

many must regret their days of sturdy endeavour, strenuous struggle, and high aspiration, when they make small talk in drawing-rooms and chatter inanities through tedious social functions.

The same thought was expressed by the Cardiff correspondent of the *Westminster Gazette*, writing after Viriamu's funeral in 1901:—

The whole ceremony was a testimony to the qualities which alone the Welsh nation truly delights to honour, intellectual distinction and high character. Wealth, rank, commercial success, military glory, beside these are to a Welshman as nothing. The loss of a man typifying these two qualities was felt as a blow to the national consciousness, and created a general sense of bereavement, which was as unmistakable as it was profound.

Vir and I first met at school, before we were ten years old. In September 1865, Mr. William Watson, B.A. of London University, opened a school at Oakley House, Wellington Place, King's Road, Reading. The pupils, at any rate at first, were chiefly the sons of Nonconformists, some of them the sons of eminent Nonconformists,—Vir himself, son of the Rev. Thomas Jones of Swansea, and two sons, Alfred and Cecil, of the Rev. Samuel Martin of Westminster. Two sons, Roderick and Crichton, of Henry Dunning Macleod were also at the school, the former at least in the first term. Oakley House started with eleven boys, of whom Vir and I were two. Four of the earliest pupils, Alfred Martin, late Head Master of Bath College, J. V. Jones, Crichton Macleod, and E. B. Poulton were at Oxford together,

and all bore some part in the administration of the Union, Martin being on the Standing Committee (Lent Term, 1879), Macleod Secretary (Summer Term, 1879), and on the Standing Committee (Michaelmas Term, 1880), the others holding office as will appear in future pages. The school grew rapidly, and among its later pupils were W. H. Seth-Smith, President of the Society of Architects, 1888-91; D. A. Cameron, Consul-General at Port Said; Owen Seaman, M.A., D.Litt., Editor of *Punch*; F. W. Andrewes, D.M., Pathologist to St. Bartholomew's Hospital; G. P. Jacomb-Hood; and the late Professor W. F. R. Weldon, D.Sc., M.A., F.R.S.

Beyond the fact that Vir was active and successful in the school games and very clever, I can remember but little of him during the two years that we were together. Mr. Watson's brother-in-law, the Rev. W. Roberts, who often visited the school and greatly amused and interested us with puns and jokes, remarked 'How very amusing', the moment he heard Vir's Christian name, Viriamu. I was struck, as a small boy would be, with the fact that we were almost exactly the same age, both having been born in January 1856, and also that Vir's birthday, January 2, was the day after my father's.

The only incident in Vir's school-life which made a deep impression on me was a quarrel between us. I do not remember the cause, but it certainly sprang out of some new pattern in the ever-turning kaleidoscope of boy-friendship. We all remember enough of our youth to know how the new affinities are looked upon by the old. Any feeling of resentment is quickly dissi-

pated by the formation of a fresh alliance; but even while it lasts it is absolutely hidden under an impenetrable covering of reserve. But in Vir I met with a great exception. I learnt from him at the age of ten years what Bonamy Price enforced upon me at more than twice that age—that in dealing with men you cannot always reason correctly from cause to effect: your premisses are not certain. Vir withstood me and delivered a long impassioned remonstrance, arguing that he was being treated wrongly, unfairly. His school-fellow was a sufficiently ordinary boy to persist in doing the wrong without saying much in his own defence, but he was in reality deeply impressed and can now, after the lapse of five and forty years, remember Vir's earnest look and the spot in the school garden where he stood.

After Vir had left Oakley House in July 1867, he entered University College School. His father was then in London, and Vir lived at home. His sister recalls memories of his methods of work and power of concentration at this early age:—

I was always struck by Vir's ease in mastering his lessons. When he went every day from our house in Norwood to University College School, he would sit in the evening with his books before him, humming a popular air, keeping time with his fists on the table, or beating the floor with his heels. He seemed an idle, careless little vagabond, but we found that he was really intent upon his subject, and quite heedless of the buzz of talk around him or of any word addressed to himself. This grasp and power of concentration without apparent effort in the midst of distractions, lasted I think through all his life.

Vir's next school was the Normal College, Swansea, and at the age of sixteen he entered University College, London, where he studied from 1872 to 1875. His wonderful successes at London University were followed with the keenest interest by his old school-fellows at Reading.

It was a high time in the history of the examination movement in England, when a Board employing men from here, there, and everywhere, to examine students from anywhere, prepared Heaven knew how, could arrogate to itself, without criticism and without reproach, the title of University, and University of the greatest capital the world has ever seen. The system seemed to fit the average educational intelligence of the day; for both test and method were accepted with satisfaction, and applied in various parts of the Empire. What other nations thought of our procedure may be inferred from the following incident which I owe to my kind friend Mr. Roland Trimen, F.R.S.:—

When the 'Challenger' made her memorable voyage for deep-sea exploration, she paid a visit of some weeks' duration, in the year 1873, to Simon's and Table Bays; and the event was marked by a cordial interchange of hospitalities between the distinguished visitors, scientific and naval, and the local authorities and other residents of the Cape Peninsula. I had recently taken charge of the South-African Museum, and was naturally one of the earliest to meet the members of the scientific staff, of whom the first to call at the Museum was that gifted naturalist, the late R. von Willemoes-Suhm, whose loss to Science and to his many friends occurred soon after the 'Challenger' had proceeded on her eastward voyage.

Tall, erect, and handsome, always well-dressed, and

with the bristling moustache and much of the manner of the *beau sabreur*, Willemoes-Suhm was a conspicuous figure among his scientific colleagues, and was undisguisedly proud of his aristocratic descent and of his many accomplishments. Amongst other things he rather plumed himself on his knowledge of the English language; and thereby hangs the little anecdote I am about to relate.

At a dinner given by the Governor to the 'Challengers', I was placed between Willemoes-Suhm and his very opposite in the person of a member of the Government—a 'Responsible' Constitution had been bestowed upon Cape Colony only the previous year—who was also a profound mathematician, and a prominent member of Council of the then newly founded University of the Cape. I introduced the Schleswig-Holstein naturalist to the Minister, who was a truly excellent Scot, but naturally reticent, and with a somewhat 'dour' manner and rather severe aspect, which did not at all relax towards the gay young foreigner. Conversation, however, went on rather fitfully, and presently the older man said, 'You'll be interested, perhaps, to learn that the Colony now possesses its own University.' 'Ah! an University; that is good!' rejoined Suhm;—'tell me, then, who are your Professors?'—'We have no Professors,' was the reply;—'It's an *Examining* University.' 'Wait! Stop!' cried Suhm,—'I do not understand. How can it be? No Professors?'—'Tis simply an *Examining* University,' repeated the Scot, with some asperity. 'So! you then examine the students first, and you teach them afterwards!—What you call in English "put the cart before the horse!" Ach! but this is hellish!'

As this forcible remark came from the ardent lips of Suhm, its instant result was to freeze the offended minister into rigid silence; his mouth closed like a rat-trap, and he deigned not another word during the rest of dinner; but this did not seem to affect the gaiety of the Schleswig-Holsteiner.

Afterwards, however, as the party was dispersing, Suhm suddenly asked me, 'Is not "hellish" a good English word?'—'It is certainly not very often used in polite society,' I said, 'and not exactly what we should call a "drawing-room word"'. 'Ach!' he replied 'that is strange; for in German we say always "höllisch" this, or "höllisch" that; it is a quite usual word. Now can I see what made the old gentleman so angry; but what I said was true, quite true!'

Whatever others may have thought of us, the England of that day was profoundly self-satisfied. That time is fortunately over. For many years the workings of a divine discontent have been evident, and our warmest sympathy is for those intrepid spirits who would attempt the all but impossible task of transforming an army of clerks into a seat of learning. But I am writing of wellnigh forty years ago, when the news of Vir's place at the head of the Matriculation list of London University in 1872 was received at his old school with an emotion akin to awe, and whispered with bated breath. It was indeed a remarkable achievement considering his age, and remembering the amount of energy and attention which were then concentrated upon that examination. His sister wrote to a friend on July 16th, 1872:—

Now for glorious news! Vir has passed 1st in honours, and £30 per annum for two years. I feel proud of him, for he is only sixteen, and to come out 1st in a competition with 500 students is no little triumph. It is too delightful to me, and seems almost incredible. He is quite a hero now amongst us, and will be one in Swansea for a few days on his return.

Some indications of work and other interests in London

are to be gained from Vir's letters to his father and sister. Thus he wrote to his father in 1872:—

68 George Street,
London.

November 7.

I am glad that the children enjoyed themselves so much on the 5th. For the first time for many years it dawned on my head without producing any feeling of anticipation of the evening in my breast. The fashion in London now is to make gigantic Guys representing unpopular members of the Cabinet, and drawing them through the streets to expose them to the ridicule of men, women, and children, who surround the cart, the momentary throne of the Guy.

A letter to his sister written probably in 1873 gives some account of his work for the first B.Sc. and tells of his meeting with an old schoolfellow:—

1 Hardwick Place,
Harrington Square, N.W.
February 16th.

MY DEAR ANNIE,

I was very glad to receive your epistle this morning, for it is something out of the way to hear from you. (Don't take this as a reproach but as a compliment.) I am glad the children liked the valentines—Morlais's is the only one I sent off, so he ought to value it. Your excuse for not sending us any was very nice indeed—a kind of mollifying compliment—'they were all too trivial for University men'.

I was coming out of Chemistry yesterday when a young fellow whose face I knew came up and asked me if I knew a fellow named Jones in the Chemistry Class; whereupon I made answer, 'I am that Jones.' He then said, 'How are you, Vere? Don't you know me?' I said,

‘Yes, I think I do; are you not Roderick Macleod?’ He said he was Roderick Macleod. Do you know who this is? He was, while I was at School, first in Mr. Watson’s whom he quitted last Christmas to come to University College, to work for his B.A. and Indian Civil Service Examination.

I heard Alexander Ramsay give a Geological Lecture [at the Royal Institution] and shall hear the great scientific men of the day during the course—Tyndall, Clerk Maxwell, Clifford, etc. I don’t think that Huxley is going to give one of the lectures: I wish he were. We have in Williamson’s Class begun Organic Chemistry, which is intensely interesting: we have long series of alcohols, and ethers, and aldehydes, and acids, connected in a complicated way, a way that I like discovering: I assure you it is far more delightful than mineral chemistry. I have begun Zoology too, and like it exceedingly. Grant is an old man of 75 or 80; and he looks on man simply as an animal, and on his mind, as far as I can see from his lectures, simply as the result of his organization: he seems indeed to regard life altogether as simply resulting from the way in which the molecules of the elements are aggregated together in order to produce the body.

It is not surprising to learn that one who wrote thus of his work was awarded in his First Session (1872-3) the first medals in the classes of Chemistry and Zoology, a second medal in Physics, and an Andrews Prize for students of one year’s standing.

In a letter to his sister written in August 1873 he again speaks of his work. The maturity and detachment of the opening paragraph is characteristic and, considering the age of the writer, remarkable. He was seventeen on January 2nd, 1873:—

50 Mornington Road,
London, N.W.

August 2, [1873].

You think possibly too much of my successes. The more I have the more humble I feel (this is a fact), but nevertheless I am glad that you are all pleased.

I have some more news for you. Perhaps you know that I was up last week for 1st B.Sc. exam. I was ill throughout it and could not cram, so had to go in as I was, and the result I have heard to-day is that I have passed first division.

As a postscript we find: 'I forgot to put that I came out 4th in Practical Chemistry at the College.'

In the First B.Sc. referred to in the above letter, Vir was second in the First Class in Chemistry.

In his Second Session (1873-4) at University College Vir obtained the First Prize in Applied Mathematics, Physics (second year's course), Geology, Philosophy of the Mind and Logic. He was also awarded the First Andrews Prize for students of two years' standing, in the Faculty of Arts and Laws or in the Faculty of Science.

In 1875 he passed the 2nd B.Sc. and in the Honours Examination obtained the University Scholarship in Geology and was second on the list and first in the Second Class in Logic and Moral Philosophy.

His career at London University was still unfinished when Vir, in November 1874, came up for the examination at Balliol and was awarded a Brakenbury Scholarship in Mathematics. His sister's letter gives a lively picture of the delight with which the family received the news:—

Swansea,

November, 1874.

We are indeed overjoyed at the brilliant reward of your exertions. (You see, I give you credit for working hard as well as for being a genius!) It is most gratifying to think of your running down to the classic city, and returning laden with spoil stolen from the students who inhabit Balliol.

.

Brynmor was so thoughtful as to telegraph last night, and it was especially kind, as he was obliged to go to the General Post Office to do so. Papa read us out the good news while we were at supper. Picture the scene—Mama weeping at the head of the table, and trying to look as if she were laughing; Mon with mouth open and eyes sparkling; Robert thumping the table and saying ‘By George’; Annie keeping Mama company in the dissolving line; and Papa, with the telegram in his hand, beaming over all.

It is a great thing for you, dear, to be able to reward Papa with such intense pleasure as he is now feeling.

You will be home in a few weeks—quite a hero!

.

Your loving and proud sister,

ANNIE MAINE.

Vir’s departure for Oxford in January 1876 was a grief to his father in Swansea. His sister wrote January 23rd:—

I believe my visit to Papa on Friday evening was unusually *à propos*, as he was making dismal retrospects of the parting with you, and a little speaking out of his feelings blunted their edge. You had the honour of being mentioned by him in the pulpit this morning, in connection with a denunciation of the perpetual and

heart-rending partings of this world, which some call a 'howling wilderness'. By the way, what an elegant combination are these words *howling wilderness!* You were unfortunate in missing Papa's sermon, for though you are in a paradise, or a hot-bed of learned theology, I can venture to assure you that nothing spoken to-day at Oxford was finer than the discourse on the text—'the things which are seen are temporal; but the things which are not seen are eternal!'

The following paragraph was written by Mrs. Home after the present chapter was printed:—

I loved to see Brynmor and Vir together: it always meant hearing them too as they thrust and parried with bewildering swiftness. And when a rare pause came, they would smile into each other's eyes the message 'We *are* having a good time to-day!' before beginning the next impetuous round. Their sympathy and understanding completed my pleasure. Each was delighted when his antagonist scored a point, though if a crushing answer could be returned, he was not spared. No quarter was asked or given.

Between the brothers there was a

Beautiful friendship tried by sun and wind,
Durable from the daily dust of life.

CHAPTER II

JOHN VIRIAMU JONES

OXFORD LIFE: 1876-1881

Written in 1903: revised in 1910

WHEN my eldest daughter was a small thing she told me of a hypothesis her sweet child fancy had framed in order to explain some workings of the mind and the characteristics of different people. The human body, with its brain above and digestive organs below, was tenanted by a host of attendant elves. Greedy people kept them busily employed, overworked in fact, in the lower regions, in kitchens and sculleries. How then was it possible for work to be done in the libraries and laboratories in the upper story? Wiser people kept most of their attendants upstairs, where they were always hard at work taking photographs and phonograms of everything seen and heard, and arranging these neatly on shelves to be taken down for future reference. Often the elves registered actively and well, but arranged badly or carelessly broke the records, so that the unfortunate employer had muddled thoughts or a poor memory.

I have elaborated the metaphor a little, but it is substantially unchanged, and it naturally occurs to me as I try to recall events and sayings a quarter of a century back, the details of the closest, the most intimate friendship I have ever known with man.

If the story of a great man's life is to yield its full measure of inspiration and guidance, the picture must be complete as well as true,—free from the obliterating no less than the distorting effects of the atmosphere through which it is seen. Some there are whose loving solicitude would carefully erase everything that was not of the highest, leaving the impression of a uniform level of perfection it is not in human nature to sustain. There are others again who would fain present a picture of the man as he was, but can give us nothing but a caricature, because they never saw him with the eyes of love and sympathy. I have attempted to avoid both these sources of error,—to withhold nothing of the truth yet ever to keep before me the memory of Vir's friendship and all that I owe to it.

I have often thought, as I have been writing, of the time when he read to me Browning's 'One word more'. I objected to the realism of the simile in the lines:—

Did he love one face from out the thousands,
(Were she Jethro's daughter, white and wifely,
Were she but the Æthiopian bondslave,)
He would envy yon dumb patient camel,
Keeping a reserve of scanty water
Meant to save his own life in the desert;
Ready in the desert to deliver
(Kneeling down to let his breast be opened)
Hoard and life together for his mistress.

Vir answered:—

'I imagine that the poet would reply, "That the idea offends you does not interest me in the slightest degree; I am only concerned to know that it represents the truth."'

I came into residence at Jesus College, Oxford, and matriculated in October 1873. At some time in my second year of residence I heard that Vir had gained a Brakenbury Scholarship in Mathematics at Balliol, and that he would come up in January 1876. I called on him early in that Lent Term, influenced chiefly by the fact that we had been schoolfellows ten years before, but also by what I had heard of his scientific interests and attainments.

When we first met I was at once struck by the change in his appearance due to the cure, by an operation, of a squint which had been strongly marked in his boyhood. He was short but strongly built. His forehead was high, but a good deal hidden by light curling hair. Without regular features, his face was full of charm, and remarkable for its varying expression. Thinking deeply and at his work, his blue eyes became keen and searching, and intensity was added to the expression by the strongly contracted brows. Talking to his friends or listening to them, his face was often bright with a pleasant smile, and his eyes would become merry and joyous, melting into the utmost tenderness when his ready sympathies were aroused. This brief account of his most striking characteristics was written in 1879, and I think that all Vir's friends will admit its accuracy.

Professor C. H. Firth writes of 'the way in which his features reflected the vivacity of his temper and its rapid changes from grave to gay'. That varying expression which Vir's friends knew so well, was but an indication of the underlying intellectual and emotional mobility.

'His powers were equally great in whatever direction

he chose to apply them,' are the words in which the impression he made upon me was recorded in 1879. It was this many-sided intellect with its instant grasp of a problem, combined with the broadest sympathies and interests, which enabled him to do the great work of his life. It gave him power in selecting and controlling a large staff representing the most varied subjects, it made him wellnigh irresistible in persuasion.

He had a remarkable power of lucid explanation equally apparent in talk and in scientific demonstration. 'The extreme clearness with which J. V. explained things in conversation was one of the points that struck me most,' Professor C. H. Firth writes to me; and James Walker, Senior Demonstrator in the Clarendon Laboratory, tells me that, in 1881, when he was a student and Vir a demonstrator, he always sought Vir in his difficulties because he explained so well.

A. T. Martin brings out another important element of strength in Vir's character and one which many another friend will remember well:—

Of his undergraduate days when I was up in '78 and '79 my chief impression is that he was a good and interesting talker, maintaining his position in an argument with great skill and always with unfailing good temper. Most of us get heated in an argument; I don't remember that he ever was.

Professor C. E. Vaughan uses nearly the same words:—

I vaguely recall many talks about philosophy and poetry; and his great alertness and good temper in argument. But I can hardly remember any details.

Vir did not, so far as I am aware, dislike any man. I cannot remember his making use of an expression of dislike, and I feel sure that my memory has not been at fault. His was a double portion of that charm whose want so often robs the highest eminence of all its grace—the desire to find and the insight to detect greatness, even the faint traces of greatness, in others. He was ever the first to see and to reverence those elements of pathos or of power which are the birthright of every human being. And therefore it was that the broad circle of his intimate friends included not only his intellectual equals, the ablest Balliol men of his day, but men of every kind and degree of attainment—great scholars who achieved distinction, great scholars who failed, men who were not scholars at all, the students of all kinds of subjects, and those who cared chiefly for games and sports.

The variety of the interests which are thus impressed on a young man by his friends is one of the great educating influences of Oxford, and no one ever yielded to it more completely than Vir. If his signal success in administration and the management of men depended in large part upon his deep sympathies, it should never be forgotten that a power, naturally broad and strong, was still further widened and strengthened during his residence at Oxford.

Sir Harry Reichel, a Balliol friend who became a comrade in the great task of organizing the University education of Wales, spoke of Vir's bringing—to the direction of this movement an intellect of unusual keenness and power, tempered to the highest point by

dialectical intercourse with the most brilliant men of a College then renowned above all others for intellectual distinction.

He had a literary faculty and gift of expression that were the admiration and often the despair of men who had made literature their study. This showed itself chiefly in debate, and—taken along with a delicacy of perception that seemed to tell him, as if by instinct, what was in other people's minds—was no doubt the secret of his extraordinary persuasiveness. Indeed, if oratory be the art of persuading by speech, then unquestionably Principal Viriamu Jones was one of the first orators of the day.

His personality had a peculiar charm which made itself felt even in casual encounters, and was due to the union of brilliant intellectual gifts with a wondrous delicacy of feeling and power of sympathy. He was one of the most fascinating talkers I ever met, and while listening to his silvery tones and felicitous phrases I have sometimes recalled Pitt's remark to the Frenchman who could not understand the secret of Fox's influence, 'You have never been under the wand of the enchanter.' Like other men of powerful mind and great plans, he sometimes produced a slight impression of hardness, but those who got closer recognized in him a rare tenderness of heart and capacity for affection. His sudden death in the middle of a noble and beneficent career was an irreparable loss to the country he loved so well, and to the movement which derived from him so much of its inspiration and hopefulness.

Vir's sister, Mrs. Home, brings out another and a very essential characteristic. I, too, well remember his delight in the story from Dumas:—

He was sometimes delightfully childlike; one of his favourite subjects of conversation was the superiority of moral courage, will power, over physical prowess,

and his chief instance was from Dumas' *Les Quarante-cinq*. His eyes lit up, his face was aglow as he described Henri at the siege of Cahors, outside the city gates, when trembling and white with fear, he turned to Chicot and said, 'Chicot, have you ever seen such a coward?' Chicot answered, 'Sire, I have never seen *such* a coward.' Then the famous white plume waved in the breeze as Henri plunged into the foremost ranks, and with an inspired army behind took the gate and captured the city.

Then Vir would beam triumphantly round, and smile at us for the sympathy that never failed him in this house.

He was keen on every branch of knowledge—rest for him meant fresh activity of thought. When wearied with College work, he felt refreshed by a game of chess with some player better than himself!

Vir appreciated success in small and unimportant performance no less than in great achievement, and realized the disproportionate amount of pleasure which a little triumph so often yields. 'The sailor was very much impressed with your steering,' he told me when we had been yachting together at the Mumbles in 1878: 'he said, "That young gentleman just asked me what he ought to do, and then did it as well as I could do it myself."'

And now to compare a great occasion with the little one mentioned in the last paragraph. During the Long Vacation of 1881 we were both present for the first time at a Meeting of the British Association. It was the fiftieth anniversary of the foundation of the Society, and the meeting was held at York. Huxley delivered one of the evening lectures to the whole Association, an extraordinarily brilliant discourse on 'The Rise and

Progress of Palaeontology'. Vir's admiration and pleasure may be inferred from his words spoken to me at the close of the lecture, 'At every sentence I felt myself bowing to Huxley and saying, "you are the greatest man here; no one else could have said that as you have said it."'

And as Vir was the first to recognize and honour the qualities of others, so he appreciated the recognition of his own powers. 'I hear they did me the honour of talking about me at the Scientific Club¹ last night,' he once said to me towards the end of his undergraduate career, when his mathematical grasp and originality had arrested the attention of his teachers.

It is difficult to depict with sufficient force and reality the pervading kindness of Vir's nature. I will endeavour to illustrate it by incidents I can never forget.

One Summer Term, probably in 1876, I persuaded him to go with me on one of Professor Prestwich's geological excursions. That particular day we were to visit the quarries in the Great Oolite at Enslow Bridge and Gibraltar. In the train, on the way to Kirtlington, I was enduring about as much misery as our wretched dental apparatus is capable of inflicting. It was said, I believe by Helmholtz, that if the human eye had been sent to him as a piece of optical apparatus he would have immediately returned it to the maker. The teeth would not only be sent back, but would be followed by an action for substantial damages. Well, in those days we were all full of that delightful American story of

¹ A dining club, including many of the senior members of the University who teach science.

child-life, *Helen's Babies*, and I thought of the comfort demanded by Toddie when he was stung by a hornet. I turned to Vir and said, 'Sing "Charlie one boy day".' 'Certainly, if you will tell me the words,' said he, so I repeated the verses, and he sang them gently to a tune of his own invention. The Brakenbury scholar of Balliol singing—

Where is my little bastik gone ?

to comfort his friend, in the third-class compartment full of amateur geologists, formed a situation of such delightful incongruity that misery was impossible.

To those who would criticize the insertion of this detail I would say that it is an incident in the history of the man which will appeal to all who knew him. The impression made upon his friend is evident from the clearness with which it stands out after all these years.

When we reached Kirtlington station we examined the well-known band of fossils in the cutting close at hand, where Vir found and showed to the Professor an interesting example of *Terebratula maxillata* with the form of the 'carriage-spring' apparatus well shown in crystals of calcite.

The memory of that day has a further interest for me, in that I then saw, for the first time, another of her great sons whom Oxford mourns, H. N. Moseley, who was to succeed Rolleston as Linacre Professor of Human and Comparative Anatomy. Professor Prestwich led us to the quarry above the station where the mighty bones of *Ceteosaurus oxoniensis*, in the University Museum, had been discovered. A discussion arose as to the chances

of finding the missing parts of the skeleton and especially the skull. A plan of the original distribution of the existing bones is given on page 250 of Phillips's *Geology of Oxford and the Valley of the Thames*. Moseley had brought his copy with him, and I noticed with keen interest that he had ruled lines on the plan to indicate the probable direction of the bones to which the fore and hind limbs are attached, from which of course the position of the whole skeleton in the quarry could be inferred.

At another time when I was much troubled—I forget the cause—and came to Vir's rooms in No. 6 staircase of the Garden Quadrangle, he was quick to see that something was wrong, although I had not said a word on the subject. Without waiting a moment he began to soothe and interest his wofully non-mathematical friend with an account of some of the beautiful conceptions of his own Science. He spoke of the meeting-point of two lines receding towards infinity as the lines themselves are made more and more parallel, and of how the moment parallelism is overpassed the meeting-point advances from infinity upon the other side, as if it had swept round a majestic circle with infinity for the most distant point in its vast circumference. Then he showed how there was a Geometry of four-dimensional space although the space itself could not be imagined.

He saw that he had been successful in his kindly effort, and then admitted the reason which had induced him to arouse my interest.

Again, in 1879, when, at an important crisis I had acted rashly and foolishly, although not without provo-

cation, the whole of my troubles were confided to him. He sought to comfort me by drawing upon his store of worldly wisdom. 'The mistakes of a young man are seldom punished severely,' was the maxim he found to fit my case; and most apt and true it proved to be.

The maturity, of which I have already spoken, is a remarkable feature of the beautiful letters he wrote to his sister and her husband, when their little girl, only two and a half years old, died of brain fever on March 14, 1877:—

[March, 1877.]

MY DEAR SISTER,

I do not know what to say to you to comfort you in this great affliction. The world must look very black to you with little Rossie gone, and the other separation coming.¹ I grieve with you for her departure. I loved her more than ever I said. Do you remember our singing the song of 'The Reaper'? And it has come true; and it comes true for every one; and this is life. And we are to live; and we must be brave and ready to meet that which is appointed for us.

With very great love and longing to see you,
I remain,

Your ever loving brother,

VIRIAMU.

MY DEAR ROBERT,

I know how heavily on you falls this trial. For I have watched you all along with your little daughter; how you played with her, and how fond of her you

¹ Mrs. Home informs me that Vir was referring to their father's departure, a fortnight later, for Australia.

were, how proud. But so it is—that which we value *most* we lose often: and it is the business of a brave man to be tranquil under the heart-rending stroke.

Your affectionate brother,

VIRIAMU.

Vir was attentive to the details of dress and appearance, and considered that such care was, on the whole, an influence for good. He thought that the general use of a *négligé* costume, such as boating clothes, with all its comfort, tended towards slackness and want of control. Yet he was emphatically fond of comfort and, in a moderate degree, of luxury.

When we rowed from Oxford to Reading together at the beginning of one of his undergraduate Long Vacations, in spite of the indiscriminating hunger induced by life in the open air, in spite of his friend's expostulations, he once struck at the tinned meat and simple food of tent-life, and went off to dinner at the Inn by Shillingford bridge. 'I want to have one good dinner,' he said, 'and to dine in comfort, at a table.'

He went to the theatre, he told me, to enjoy himself, and always took a stall, a proceeding which appeared to me to be reckless extravagance in men of our means; when the same price would have procured admission to the pit on three or four occasions. He did not indulge in vigorous or tiring exercise. The long walks at four miles an hour, which were then so fashionable, did not attract him. He did not cycle in those days of high machines, although later in life he became fond of long rides on the safety bicycle (see pp. 120-1). He did not take part in any of the regular College sports or games—

rowing, cricket, football, athletics. Towards the end of his Oxford life he began Alpine climbing, and the love of it endured for the rest of his life (see pp. 121-2). I believe the hardest exercise of his undergraduate career, and that not often repeated, was taken in a few games of single fives which we played together, and also I think in lawn tennis—during Long Vacations. His favourite forms of exercise, walking and rowing, were taken very quietly, allowing plenty of time for thought and talk. He enjoyed swimming, but could never be induced to go far, and I well remember his mock abuse shouted to me across the water as I swam out to sea far beyond the others when we had walked to Langland or Caswell Bays from the Mumbles in 1878. And he was quite right, for as the result of these long swims the grass was too tempting for anything but sleep all the morning, the only time set aside for work on this delightful reading-party.

The disinclination for vigorous exercise did not by any means extend to Vir's Balliol friends. I remember one splendid walk from Oxford to Reading on Sunday, March 24th, 1878, with E. H. Irving, a wiry Australian, who rowed in his College Eight. I had previously walked the 28 miles in seven hours with some friends of my own College, but we made the mistake of waiting an hour at Streatley for lunch, and our feet became swollen and were badly blistered during the last nine miles. Irving and I determined to take food with us and not to stop at all, and in this way the distance was accomplished in seven hours in perfect comfort. We were just finishing the straight piece of road with its avenue

of elms, a little beyond Pangbourne, when a sudden and violent squall laden with fine snow swept by us. We could not help stopping for a few seconds to look back at the cloud of dust whirled up to the topmost boughs of the elms. The storm of wind lasted but for a minute or two, then died away as suddenly as it came. This was our experience of the blast which at a quarter to four on that fateful Sunday afternoon had swooped down upon the *Eurydice*, off Shanklin, and swept away 300 lives.

The recreation which Vir sought after the concentrated energy of his attack on the subjects of the Honour Schools was psychological rather than physical, and was found in festive scenes of which a type is pictured on a later page, or still more frequently in late hours, often becoming early hours, passed in the excitement of Transatlantic games of chance and skill and bluff. This particular form of rebound from a state of intellectual tension was begun in College, reached its maximum at Beaumont Cottage (1878-9), became less frequent at 10a St. Giles' when he was reading for his last School, and ended when he took his last examination and moved to 50 St. John Street. Sometimes after an evening thus spent at Beaumont Cottage I am afraid we must have disturbed the sleepers in neighbouring houses during the small hours of the morning by shouts and laughter and single combats at 'hoppy' in the road outside. 'Hoppy' is a simple test of balance, activity, and strength in hopping, in which each antagonist, with folded arms and without clutching, tries,

by charging and dodging, to compel the other to fall or touch the ground with both feet. When the game is conducted upon a hard road, and especially when two or three such combats take place simultaneously, the noise made is by no means inconsiderable.

Of that little band of friends who 'warmed both hands before the fire of life'—although not quite in the sense intended by Landor—an astonishing proportion became heads or professors of Universities and University Colleges, or gave their lives to some branch of learning!

Vir has been sometimes criticized on the ground that what was mere recreation to him and to most of us may have been injurious to one or two, spoiling their work and leading to the formation of irregular habits. However this may be, and it is impossible to feel any certainty in assigning a cause, it is of deep interest to know that the fear of such consequences forced itself upon Vir's mind and caused him keen regret. Towards the close of the period I have defined on p. 45, he more than once expressed to me this fear and sorrow.

Professor de Vries, by means of laborious experiments on plants, has found that the breeder can produce his results far more quickly when he fixes his attention not on the parents but on the offspring. The tendency to produce the required change in the descendants may be, he shows, a much safer guide than the extent to which the same change is developed in the parent. Thus the value, even though it may be hidden, of the parental stock is revealed by the offspring.

De Vries's interesting discovery provides us with a metaphor. The performance of a man's maturity reveals to us qualities and powers that were more or less hidden, more or less revealed, in the youth that was his proverbial father. For this reason I have set down and printed in Appendix I on p. 281 a dominant fact or facts in the career of many men who were at Balliol between 1876, when Vir first came into residence, and 1880, when he passed his last examination. This Appendix will give some conception of the intellectual variety and strength of the community which received in him so powerful an accession.

An interesting type to be found in the infinite variety of Balliol in the late seventies was the kindly, eccentric member who was always trying to persuade his many friends, in spite of their eagerness to make excuse, to join a society of his own invention. The precise objects of the society, which was understood to be theological, were never ascertained, but a humorous friend finally started the rumour that its purpose was 'to readjust the relationship between man and his Maker'.

Three of the men who were at Balliol with Vir became Professors under him at Cardiff—W. P. Ker, R. H. Pinkerton, and C. E. Vaughan, while P. A. Barnett of Trinity was a Professor under him at Sheffield.

Vir's greatest friends in Balliol, men I constantly met in his rooms, were, among those who were senior to him—J. B. Chancellor, C. H. Firth, Alfred Goodwin, E. H. Irving, W. P. Ker, A. V. Lazarus, H. R. Reichel, D. G. Ritchie, and C. E. Vaughan; among those of the same year—E. S. Bird (died 1882), and T. Rutherford Clark.

His greatest friend among men junior to himself was J. T. Wills, whose cousin he married in 1882. The following men belonging to other Colleges were either intimate friends of Vir or of his chief Balliol friends :—

P. A. Barnett, Scholar (1877),¹ Trinity. H. M. Inspector of Schools: Chief Inspector for Training of Teachers: formerly Professor of English, Firth College, Sheffield (now University of Sheffield), 1882–88.

A. H. Bullen, Scholar (1875), Worcester. Author.

W. Peterson, Scholar (1876), Corpus. C.M.G., Hon. LL.D. St. Andrews, Princeton, New Brunswick, Yale, Johns Hopkins, Pennsylvania: Principal of MacGill University, Montreal, since 1895: formerly Principal of University College, Dundee.

E. B. Poulton, Scholar (1873), Jesus College.

J. M. Rigg, Scholar (1874), St. John's.

I believe that all of Vir's most intimate friends are named above and on p. 47, but no man of his day was more widely known in College or more independent of the boundaries erected by clique or set.

One of the ties that bound Vir and me together—wanting between him and his chief Balliol friends—was a supreme interest in scientific subjects. There was furthermore the subtle claim of early associations. But beyond these links, the affinity between us was such that the warmest affection sprang into immediate existence. Out of this naturally and quickly grew a strong friendship between him and my father, mother, and two sisters, so that I saw more of him in vacations than I was able to do of other Oxford friends. It was very

¹ In all cases the date in parentheses is that of matriculation.

much the custom then as it is now for Oxford friends and societies to be photographed together. On such occasions—the Palmerston Club group, the group we called ‘the Ten St. Giles’s’ (see p. 73), and the Henley Regatta group—among the many friends present, we symbolized our special friendship by standing near together, with my hand on his shoulder.

As a result of our warm friendship we became the friends of each other’s friends. I gained many of the advantages of membership in a remarkable and stimulating society, while he became intimate with several of his compatriots in the College of which in later days he was to be a Fellow. For it was one of the piquant features in our friendship that he, a Welshman, should have been Scholar at Balliol, while I should have held the only Scholarship which an Englishman could then hold at Jesus College, the Welsh foundation.

We were even ‘proctorized’ together on the night of October 18, 1876, strolling down High Street almost into the arms of the Proctor by the corner of St. Mary’s Church. Vir’s plea of ‘first offence’, or to be more accurate ‘first capture’, availed nothing; for the Proctor with a smile asked him if he meant that it was the first time he had walked abroad in the evening without his cap and gown. I could not advance the same plea, although it was the first and only time, and that within a few weeks of my final schools, upon which I was called upon to contribute in this way to the University Chest.¹

¹ It was my lot to encounter the Proctors more frequently after taking my degree than before it. Being under 21, I was not unnaturally mistaken for an undergraduate. I remember Alfred Milner when a B.A. telling us that he too had been ‘proctorized’

Our friends were immensely delighted and amused at the event. E. H. Irving and J. B. Chancellor wasted a whole morning describing it in parodies of various well-known verses. A few of these are printed below: they shed some light upon the feelings with which Vir was regarded at Balliol. It may amuse my friend the Provost of Queen's to know that he was the Proctor referred to in the verses.

I

Do you ken J. V. without cap or gown?
 Do you ken J. V. as he swaggers down town?
 Do you ken J. V. when the Proctors are roun'?
 And he's fined five bob in the morning.

Yes, I ken J. V. and his comrades too,
 Poulton of Jesus and all that crew,
 Who make such awful stinks at the Mu-
 seum as they work in the morning.

Yes, I ken J. V. in his gown so gay;
 He lived down at Swansea once on a day,
 But now he's at Balliol far far away,
 And he visits the Proctor in the morning.

Then here's to J. V. with my heart and soul,
 Let's drink to his health, let's finish the bowl,
 He's as jolly a fellow, through fair and foul,
 As you'd e'er wish to meet in the morning.

II

Many have told of the Proctors of old,
 What a heartless race they be:
 They caught the pride of Balliol bold,
 They've caught and fined our poor J. V.

the night before, and even reminded that he was still *in statu pupillari*. 'I was fully aware of the fact', he had replied to the Proctor.

III

As down the 'High' at eve we went
Without a thought or care,
We passed by Queen's, my friend and I,
We passed by Queen's, I know not why,
And met the Proctor there.

And oh! confound the meeting him,
That cost us both so dear—
If e'er we pass that way again
We'll see the coast is clear—

For when we called next day at ten
Excuse in vain we made:
For there within his private room,
Yes, there within his private room,
Five shillings fine we paid.

IV

I thought to pass that way unseen, and yet 'twas not
to be,

For by St. Mary's corner did the Proctor meet with
me.

How sadly I remember closed the evening of that day,
I thought to walk in safety, but a fine I've had
to pay.

Oh! sweet it is to wander in the evening round the
town,

And sweeter still to walk the 'High' without one's
cap and gown.

But hard it is when strolling, in an unsuspecting way,
To meet the Proctor; harder still to have to call
next day.

Oh! blessings on his smiling face and on his bull-
dogs twain;

And blessings on his whole life long should he meet
me again:

Oh! blessings on his velvet sleeves, and on that luck
of mine,
A thousand times I blessed him as I paid down my
fine.

He told me how the statutes ran; he pointed out
my sin;
How if I left my gown behind, there's one would
run me in.
'Twould cost me twice as much, he said, another time,
for then
Instead of only shillings five, he'd fine me shillings
ten.

Henceforth that Proctor goes his rounds—the under-
graduate's foe—
He meets with many gownless men and some of
them I know;
But I now always wear my gown, he looks at me
in vain,
Let him fine others daily; he shall ne'er fine me
again.

I have already mentioned that 'J. V.' was the name
by which he was known to his Balliol friends, but to me
he was always 'Vir', the name which went back to our
school-days together at Oakley House. He was called
Vir at my old home in Reading, and at Oxford during
the later years of his life he was 'Cousin Vir' to my
children.

I have already pointed out that the growth of our
friendship did not solely depend upon constant inter-
course within the limits of University Terms; for Vir
often came to stay at my father's house at Reading.
He certainly visited us in the course of at least one

vacation in each of the first four years of his Oxford life. One of these visits, probably in 1876 or 1877, began in our rowing together from Oxford to Reading at the end of a Summer Term.

We started late on a June afternoon and rowed quietly down to Nuneham, sleeping in my bell-tent on the south bank opposite the beautiful wood-covered slope, the cottage, and rustic bridge to the little island. Irving, I think, accompanied us thus far and then returned to Oxford. The swim across the river before breakfast next morning stands out very clearly in my memory, especially the strange, pleasant feeling of gliding under overhanging branches nearly touching the head, and the film on the smooth surface of the water shining in the level light of the early sun. After breakfast we drifted lazily down to Shillingford Bridge and camped, still on the Berkshire side, just above the bridge. Vir, after his dinner at the inn, returned in great spirits for a pleasant evening with some friends who lived near. I cannot remember another camping-ground, and hence conclude that we awoke to unusual exertions and sculled in turns to Reading the next day. Later in the vacation Vir wrote that any pains and discomforts of these days on the river had entirely faded from his mind, leaving only an impression of pleasure unalloyed. Certainly the pleasure must have greatly predominated to obliterate the memory of the pain of sun-burn and the peeling skin of arms and neck, and the unappetising discovery of a large slug curled up in the condensed coffee and milk at breakfast by Shillingford Bridge.

In Christmas vacations we took long walks over the crisp roads, and I remember him joining us in charades, and this not only in Reading but one winter when we met at Lewisham. One vacation we worked through a large cabinet of geological specimens which had been given to me. The whole scene comes back very vividly as I look at his handwriting on the labels. His life was chiefly devoted to Physical, mine to Biological Science, but we were on common ground in Geology, and I have the best of reasons for knowing how thorough was his work in this subject at University College, London; for he lent me his notebook when I was studying for the Burdett-Coutts Scholarship, and I copied from it over 120 closely written pages of foolscap.

The memories of our doings at Reading in summer vacations all centre in the river, in picnics up stream to Mapledurham, and in the band of friends who rowed down to Henley Regatta and back through the crowded locks late in the evening. He stayed with us for the Regatta in, I think, two Long Vacations. And one year, 1878 or 1879, we were so large a party that my bell-tent was put up on the lawn and some of us slept there. We were all photographed in front of it to celebrate the occasion. Among the thirteen friends from Oxford were A. Goodwin, E. H. Irving, and T. Rutherford Clark; and two who had been at Oakley House School, A. T. Martin of Worcester and F. W. Andrewes of Christ Church.

In the summer of 1878 I joined Vir in a delightful reading-party at the Mumbles, near Swansea. I started from Reading on my bicycle, with its 56-in. driving

wheel, carrying all the baggage strapped to my back instead of to the machine. After sleeping beside a haystack on the gentle eastern slope of the Cotswolds, disturbing in the dusky dawn a great shaggy dog curled up asleep in the middle of the road at Northleach, another short sleep in a field beyond Cheltenham, I arrived at Gloucester and ignominiously took the train. The added weight bearing on the points of contact with the saddle had reduced me to the condition of the monk in *Hypatia*, who, after excess of rowing, admitted that 'of sitting as of all carnal pleasures, cometh satiety at the last'.

At the Mumbles I had the great pleasure of often meeting Vir's sister, then Mrs. Maine, who lived near and had made all the arrangements for us. Among those present were two able friends of Vir's who were not Oxford men, Christopher Brock and George Sydney Davies. Both died prematurely many years ago. The party is all to me now a confused but enchanting vision, not indeed of reading, but of bright sun and picnics and long swims, of billiards and endless talks on all kinds of subjects, and of one splendid sail to Oxwich Bay.

The free and easy comradeship between Vir and his friends is well shown in the following passage from a letter written to his sister about 1878 when paying a visit to the Head Master of his old school at Reading, moved since our time to Caversham :—

It is very good of you to offer to make me nightshirts. I think I shall need one soon. At present I have a borrowed one of Irving's which with one of my own

(the other being in a place I do not know) 'makes up my sum'. So that truly though I am respectable, I have but a borrowed respectability at the foot of which the canker-worm of debt gnaws.

The letter goes on to speak of their father in Melbourne.

I agree with you about the fine weather—it makes this a fairy land: and when the household has retired to bed here, which they do about 10 o'clock, I wander alone on the velvet turf, sometimes smoking my pipe in the moonshine and starshine, suspiciously at peace with the world and myself, and it has occurred to me that even the stars are invisible to the 'émigrés' (this is correct for they are exiles for religious purposes), and that they have 'a new heaven and a new earth'. But on these summer nights the new heaven cannot be bluer, nor the new earth fairer than the old ones.

Mrs. Home gives a delightful interpretation of the word 'suspiciously' as used by Vir:—

I think 'suspiciously' is right, as Vir ever loved his little joke. When we were children, and our elders were purring softly and sipping their little evening doses of to us mysterious liquids, we used to whisper to each other, 'Theirs is now the peace that passeth all understanding,' one of the phrases we used to puzzle over.

At the beginning of Vir's second year at Oxford, his father had finally decided to accept the pastorate of Collins Street Church, Melbourne. Mrs. Maine wrote to her brother February 3, 1877:—

I am glad you approve of Papa's decision. You seem to look at this great enterprise as I do. It will be a great trial to us all, a terrible breaking-up, but still it

seems the right thing to do—it has been quite forced on Papa.

It will only be like a long holiday, but if he should find the new life wider and more hopeful than the old, he can always stay there, and send for us all to join him.

The little ones are in great excitement. Papa has been quite ill all the week—the strain of mind has been so great. He needs every support to enable him to follow out his decision. It all seems a dream! But we shall know all too soon that we are awake! It is trying for you to be patient away from our consultations, but Papa emphasizes 'I shall be back again'.

Vir replied a few days later, quoting the opinion of E. H. Irving, a native of Melbourne: 'It is not likely that anybody that goes out there will be foolish enough to come back.' This great friend became known to Vir's father after his return from Melbourne in May, 1880, not long before Irving himself went back to his Australian home. Mrs. Maine wrote to Vir on August 18 of that year:—

I like Edward Irving immensely—he seemed quite to belong to us: it is rather sad to like anyone so well, and to have him pass out of one's life completely. Papa was charmed too . . . He used to amuse Papa so much, that the latter would give quite a Teufelsdröckh laugh.

A few days earlier, on August 6, his sister had written from Llandrindod:—

Mama and I went to Rhayader yesterday to see the house where Papa was born, the streets he played in and the churchyard where the ashes of his ancestors

lie. It is a lovely place, picturesque town and charming scenery.

.....
 Last night the Oxford invitation came in due form to Papa, offering eight hundred pounds a year—he is thinking of it . . .

The above letter refers to the Congregational Church in George Street, Oxford.

The persuasive eloquence of some of his friends, his own great love for and sympathy with young men, caused him to think seriously over the matter. The work there fascinated him greatly.¹

He finally decided that he was not strong enough to accept the offer. It was probably in connexion with this invitation that Vir's father came to Oxford and stayed for a night at 10a St. Giles'. I then heard, for the first and last time, the low musical voice, with all its suggestion of power in reserve, like the rhythmic rush of the sea on a sandy shore,—the voice which had borne so vast a power to sway the emotion and kindle the imagination. There could be no doubt about the origin and source of one of the gifts which made Vir a dominant influence over his fellow men.

On Saturday, June 24,² 1882, the great Poet-Preacher passed away. The doctor upon his own responsibility abstained from summoning the family to the death-bed. Vir was justly indignant. He told me that the doctor had said 'When I die I want to be left

¹ *Biographical Sketch in Lyric Thoughts of the Late Thomas Jones*, p. 24.

² By an unfortunate error, the date is given as 'Saturday, June 19', in *Lyric Thoughts*, p. 27. June 19, 1882, was a Monday.

in peace and do not wish my family to be summoned to my bedside'.

'I replied to him bitterly,' said Vir, "'However it may be with you, the last words of such a man as my father are a priceless possession to his children.'"

He wrote to a friend, on June 26:—

What is left of him who loved us more than is given to most children to experience will be carried to the Chapel, then to Swansea Cemetery. His request was that his body should be buried there in the windiest highest part overlooking Swansea Bay.

CHAPTER III

JOHN VIRIAMU JONES

OXFORD LIFE: 1876-1881

Written in 1903: revised in 1910

VIR never spoke at the Union. He took considerable interest in it, and went to the debates from time to time. I recall especially the pleasure he received from A. A. Baumann's wonderful speech deriding the popular agitation aroused by reports of the Bulgarian atrocities (see also pp. 155-6). The climax of John Bright's speech on the subject was parodied in a series of variations on the triumphant 'I told you so' of the inveterate scold.

Just what I said, just what I said, I told you so. Mr. Cobden and I, we told you so. Now he's dead but I'm here: we told you how it would be.

This passage rendered in the deep majestic voice of the mighty orator—a splendid imitation—greatly impressed and amused Vir, as indeed it did the whole House, and he used often to repeat it, faithfully reproducing the magnificent intonation and extraordinary effect with which the sentences were delivered. The impression produced on his friend is shown in the ease with which it is now written down¹ for the first time, after the lapse of more than twenty-six years.

¹ In 1903.

Several Balliol men¹ held the chief offices at the Union while *Vir* was in residence, and he probably knew them all more or less intimately. Alfred Milner was President in 1876, A. A. Baumann and Lord Lyvington in 1877, The Hon. W. St. J. Brodrick in 1878. T. H. Warren was Librarian in 1876, and B. F. C. Costelloe in 1877. Of Presidents from other Colleges all the following were well known to him: R. F. Horton² (1877), R. A. Germaine³ (1878), N. Micklem⁴ (1878), E. B. Poulton (1879). It is therefore clear that *Vir* had exceptional opportunities of entering into the life of the Union, if he had cared to do so; and there can be no doubt that he would have attained the highest success. I think he was unwilling to devote the time and energy which are necessary for the preparation of a successful Union speech, and he would not take part in debate hurriedly or on the spur of the moment. He worked very hard when he was preparing for examinations, and deliberately employed his leisure in reading and recreation of the most varied kinds. But the time and thought he would not devote to himself he willingly gave to his friend. He even—oh! supreme forbearance of friendship!—listened with patience and sympathy to the rehearsal of speeches, and I well remember the encouragement and help often received from his stimulating criticism.

¹ See Appendix I, p. 281, for a brief account of many Balliol men of *Vir*'s time.

² Scholar (1874) and afterwards Fellow (1879) of New College: Minister, Lyndhurst Road Church, Hampstead, since 1880.

³ Scholar (1874) and Hulmeian Exhibitioner (1876) of Brasenose: died 1905.

⁴ New College (1874): K.C., M.P., Watford Division, Herts, 1906-10.

Vir served on the Library Committee of the Union in the three terms (1877-8) in which I was Librarian. In the two later terms he acted as Sub-Librarian. I feel some pride in all three Library Committees, especially that of the Lent Term of 1878. The names of its members were read to the House on December 8, 1877.

J. V. Jones, Scholar (1876), Balliol, *Sub-Librarian*.

Rev. Charles Gore, B.A., Scholar (1871), Balliol, Fellow of Trinity. (Bishop of Birmingham.)

C. V. Green (1874), Keble.

W. P. Ker, Snell Exhibitioner (1874), Balliol. (Professor of English Literature, University College, London.)

Richard Lodge, Scholar (1874), Balliol. (Professor of History, Edinburgh.)

The last two names were suggested to me by Vir himself.

Vir's name appeared once only in connexion with the Union elections—at the end of the Summer Term of 1878, when he proposed me for the office of President. His nominee was beaten on that occasion by N. Micklem, of New College, the votes being 303 to 297. I shall never forget the kindly way in which he acceded to the wish that he should be my proposer, expressing the pleasure it was to him that our names should appear together.

I remember Vir saying to me—it must have been in the summer of 1877, after a terrific onslaught I had made¹ upon a late Secretary for War and for India—‘All my friends are abusing you, I have to defend you from everybody.’ He who fights must expect to be hit.

It was not only in the preparation of Union speeches

¹ May 17, 1877.

that his counsel was asked and given. Searching among the notes and papers of a quarter of a century past, with the deepest, saddest interest I see his pencilled corrections in a sketch¹ of some aspects of Oxford life as it was to us, showing how fully he shared every thought and secret during the most important years of life, the susceptible responsive years, the years of development.

The Palmerston Club was founded during Vir's in-college residence. He was either an original member or at any rate joined very early. He appears as one of the group of twenty-nine members photographed in New College Cloisters.

No description of Vir's undergraduate life would be complete without some allusion to those festive evenings when

. . . all within was noise
Of songs, and clapping hands, and boys
That crash'd the glass and beat the floor.

Many a time have I been present, perhaps the only non-Balliol man, when these parties have been given by Vir or his friends. They were generally held in honour of some friend who had come to Oxford, to congratulate one who had been successful in the Schools, or more characteristically still to cheer one who had failed.

On these hilarious occasions the first song would generally be demanded by acclamation from a man with a singularly unemotional and changeless face. 'Come Figure-Head, "The Three Jews";' 'Yes, "The Three Jews,"' would be heard on all sides. The man thus

¹ Printed as Chapter VI of the present volume.

appealed to, after a little hesitation which was not accepted at all, sang the amusing folk-song called for by his friends, the grave unmoved face and deep stern voice adding greatly to the ludicrous effect of the words. The song I have never heard since those days. Perhaps it has never been heard by any of that band of friends who are now scattered over the world. If these pages should be seen by any of them, I doubt not that its name will recall those scenes and the memory of one who was always among the merriest when others were merry, but was the friend to be sought before all when sorrow or difficulty had brought the need of sympathy and help.

Then another name, honoured and alas mourned in Oxford and St. Andrews, would be called, and D. G. Ritchie gave the description of Oxford in the style of Sir John Maundeville, by 'Friar Tuck', in the *Shotover Papers*. This clever parody of the quaint old style was given with great effect, special piquancy and flavour being imparted by the pleasant Scotch accent of the speaker. The *Shotover Papers* are not often seen out of Oxford, so I have thought it well to reprint the chief passages:—

He that wil passe to Oxenforde may goe by many Weyes; for it may be that he comethe from Towne, and then he stoppeth not at Diddecote, that evylle place, where be many platfformes and mightie draftes of winde. And at Diddecote is a greate Marveyle to beholde, for there is a Cave with steppes, and stynkyng, and menne goe down into it, and loe you see them soone on a far platfforme, alyve, but their traine is gone.

Now ye schulle undirstonde that nere the Cytee

rennethe a Ryvere and uponne it are Schippes both bigge and litylle, but withouten mastes. And the bygge Shippes goe righte swiftly butte the Menne in them are exceedynge wyckyde, for loe, when a litylle Schippe crossethe their pathe thei straightweye rowe over it, and the Manne in the litylle Schippe criethe oute pitiefullye, but the otheres passe on and blaspheme.

And loe ther is another great Marveyle, for the Menne of the Cytee goe at certaine seasouns of the yeere toe a great meadowe, whilk they y-clepen Cowelee. And thei putte stickes in ye grounde and a Manne staundeth before hem with a Batte of wood. And another runnyng triethe to slaye him withe a harde and weightye balle and anon hitteth him full sore. Butte an if the Manne withe the Batte hittethe the balle he fleeth to and fro for deare lyffe—and no Manne knowethe the cause wherefore it may ben.

Now in the Cytee of Oxenforde ther ben a dreadfulle wondere to see, for in the nyghte-tyme there goe aboute Develes swifte and subtile and haveinge blacke wyngges lykke vampyres, and these are highte Progetyrs. Now it chauncethe that if a Manne spye a Progetyr but is not seene of himme—he straitwaye rennethe to his home rejoicynge muche and makethe merrie withe his fellowes. Butte if y^o Progetyr catchethe a Manne he discomfyteth him sorely tille appeased withe Gold and Sylver. Butte Somme Menne doe afterwarde use mendacitie and affirme that the Progetyr was undone whenne in soothe themselves were.

Professor C. H. Firth, who has looked through this account and confirms my memory, reminds me of a characteristic figure, that of B. F. C. Costelloe, the

Irish total abstainer who, though he drank nothing but water, was a greater terror to life and limb than any Anglo-Saxon flushed with wine.

Towards the close of the evening Vir would sing 'The Lost Chord'. The 'Grand Amen' made an appropriate ending: it was, moreover, believed by his friends that Vir never could sing the beautiful words with sufficient pathos and expression without some slight artificial excitement.

Madame Antoinette Stirling came to Oxford I think twice, while Vir had rooms in Balliol, and we were all deeply impressed by her magnificent rendering of the song. As Vir expressed it, "The Lost Chord" produced a great moral effect in Oxford.'

The great artist finds expression in one form in one generation, in a different form in another, and each generation is moved not by the form but by the expression of its great artists.

When I went to congratulate Vir on his first in Mathematical Finals I found him alone at dinner in his rooms at Beaumont Cottage. He dismissed the subject at once, and proceeded to discuss a problem which was evidently puzzling him;—how it was that he had been so much affected—more affected than others—by the entertainment provided by a friend in honour of the occasion. Undoubtedly, a little champagne taken in the middle of a hot summer's afternoon may produce unexpected results, especially if a man be already somewhat excited; but he was greatly exaggerating when he chose the blunt English word to describe the effect in his own case.

Here as elsewhere I have attempted to give a true as well as a sympathetic picture. The truth will be distorted and not revealed to those who assume that a

sympathetic treatment means a softening of outline, and who would therefore read into my words something other than their plain meaning. The occasion described in the above paragraph was an important one. It marked the end of Vir's undergraduate Terms, and also the rather sudden transition into a life of responsibility and purpose from a happy careless time of recreation and gaiety in fullest measure, alternating with bursts of work accomplished with less effort and in less time than are required by most men of the highest ability. Throughout this period of youth Vir and his friends often made merry together, but one and all would have regarded simply as bad form that excess of merriment which so readily passes into superlative dullness.

Professor C. H. Firth recalls Vir's

happy way of chaffing Lazarus, who when he began the study of medicine discovered in himself successively the symptoms of every known disease.

Of a friend who was devoted to the society of ladies Vir maintained it was characteristic that even the four-footed companion of his walks should be a female!

'The humble offer of a life-long devotion is expressed in his look whenever he speaks to any woman,' he said of the same friend.

'An artist is the favourite of nature, husband of the only one to whom polyandry is legitimate,' he wrote to his sister from Guernsey, probably in 1878.

Vir's humorous defence of swearing under certain

circumstances so interested me that I made a note of the argument before it was entirely forgotten.

May there not be a moral duty in swearing sometimes? If an unpleasant state of mind can be dissipated by a word of little harm in itself, is it not, I ask, a duty to oneself and to one's friends to utter the word? The man who continually swears is contemptible and objectionable: he weakens language: he uses first-rate remedies when he is well till they can do no good when he is ill: he lacks the justification for an oath. But give me the man who swears only on grand occasions, and I respect him the more as one who has found a cure for the ills that flesh is heir to and uses it in its right place.

Words such as these were spoken in a conversation arising after an accident which every smoker will appreciate as a 'grand occasion'. A number of friends had met in his room in No. 6; I think it was after a breakfast. Smoking began, and he stretched out his hand for his favourite carefully coloured meerschaum, and touched a tobacco-pouch balanced against a candlestick. The pouch fell over and knocked the treasured pipe into the fender where it was broken to pieces, and quite beyond the hope of repair. I remember well how the brightness faded from his face, as with a dark frown he picked up the brown fragments.

One other 'grand occasion' was a most unusual piece of ill-luck. He was staying at my father's house in Reading during a Long Vacation, and we rowed a party of ladies from Caversham to Mapledurham against a strong stream, in a boat borrowed from a friend who was known to be very careful and particular about his belongings. We tied the boat at the landing-place below

the mill on the northern shore, and made our tea on a natural lawn overhung by steep cliffs of chalk, formerly quarried, but with its ledges now overgrown with grass. The influence of the scene and the evening stillness brought a delightful sense of calm from which there was soon to be a rude awakening. Returning to the boat, the ladies entered and the men tried to push off from the shore, but in vain. As they increased their efforts, water appeared in the boat, rapidly rising. The ladies hurriedly disembarked, and it was then discovered that the boat had drifted a little, so that it had come to rest on the top of a pile a few inches below the surface of the water, and of course concealed by the boat itself. A large and strong piece of iron projecting from the top of the pile was driven into the boat by the weight of the party, and naturally tore a large hole in the bottom when an effort was made to push off. There was nothing to be done but walk home and arrange for the boat to be carried back. And we had all been talking and thinking of the quiet peaceful time we were going to enjoy, floating down the stream on our homeward journey. The two friends felt that without some explosive liberation of energy they would have been but morose and ill-tempered members of the band about to start on its enforced and unexpected walking-tour. They withdrew as if to discuss the situation very seriously and exploded with considerable vehemence, and in a few seconds were resigned and cheerful.

Vir had warm friends among senior members of the University as well as among those of his own age. The

Master of Balliol invited him to stay at his house after he had obtained the scholarship and before he came into residence. His dominant impressions of Jowett were those felt by many a Balliol man—of one who silently, and therefore severely, perhaps too severely, tested the intellectual strength of the material with which he was called to build.

There was one good story of Ashton and the Master which especially delighted Vir. I have heard him tell it more than once. The Master had propounded the question, 'Can a good man be happy on the rack?' Ashton, uncertain as to the answer that was expected of him, but a little inclining to the affirmative as the more probable, began slowly and with marked emphasis, 'A *good* man *can* be happy'; but at that point he saw from the Master's face that he had chosen wrong. Without any hesitation he repeated the first part of the sentence and carried it to a triumphant conclusion: 'A *good* man *can* be happy on a *bad* rack.'

Vir was also much amused by the absent-minded way in which Arnold Toynbee said to a friend who wanted to consult him, 'You must come and see me about it to-morrow. Oh! no, I forgot, I am going to be married to-morrow.'

As soon as Vir came into residence he went to Alfred Goodwin,¹ one of the Fellows, who was also Professor of Greek at University College, London, for the classics of the two examinations which were then necessary before mathematical or scientific work could be begun. A strong friendship at once sprang up between them.

¹ Scholar (1868) of Balliol: died 1892. To be distinguished from the Balliol scholar of the same name mentioned on pp. 47, &c.

Vir often spoke of him and of the great pleasure he received from their talks. I recognized, too, by the way in which he referred to Professor Morris, who held the chair of Geology in University College, London, that pupil and teacher had been on the most friendly terms. He had a warm regard for his two College teachers in the mathematical schools, J. W. Russell and Henry J. S. Smith, the distinguished Savilian Professor of Geometry, author of so many famous and brilliant sayings. Vir remarked concerning Henry Smith that he said whatever came into his head,—good things and things otherwise. Later on, when Vir worked in the Clarendon Laboratory as student and then as Demonstrator, I have heard him express the warmest admiration and, indeed, affection for Professor Clifton. It is only proper to add, however, that he regretted the want of a spirit of research in that department.

Vir did not often speak to me of Professor T. H. Green, but to others he did, and he certainly was one of that great body of men whose lives were influenced for good by the power which did so much for Oxford, and through Oxford, for the world. On March 29, 1882, he wrote :—

His death is a great blow to me. I only heard of it yesterday morning, not having seen the London papers. It was quite sudden—I did not even know he was ill. There is no one who knew him who will not feel his loss acutely. He was wholly honest, and it always did one good to be with him. His place in Oxford cannot to my mind be filled with any one else. He was really Liberal in his views : most people here only pretend to be so. The funeral to-day was very sad. I have been greatly grieved.

When Vir came into residence in January, 1876, he lived in Room 5, at the top of No. 6 (now No. XVI) Staircase, in the Garden Quad, at Balliol. He left these rooms at the end of the Summer Term of 1877 and went into Room 4, of No. 10 (now No. XX) Staircase, in the same quad. He took a First Class in Mathematical Moderations in the Term (Michaelmas, 1877) following his migration, and lived in the new rooms for a year, his in-college life coming to an end at Midsummer, 1878. His first set of rooms was quite comfortable but high up and, as it seemed to me, rather dark. The second was a fine set on the first floor.

There seemed to me something strangely familiar about the room allotted to my son, R. W. Poulton, in Michaelmas Term, 1909, and it was not long before I realized that I was in Room 4 where so many happy hours had been spent with Vir in 1877 and 1878.

At the beginning of Michaelmas Term, 1878, Vir took rooms in Beaumont Cottage, Beaumont Buildings, St. John Street, living there for a year. It was towards the end of this period of residence, in the Summer of 1879, that he took his First Class in Mathematical Finals. In this year he was also elected a Fellow of University College, London.

As a B.A. Vir then lived for a year from Michaelmas Term, 1879, at 10a St. Giles'. E. S. Bird took rooms in the same house, and the two friends had meals together. Two other friends, P. E. Matheson and P. A. Barnett, lived in the adjoining No. 10, and D. G. Ritchie and A. V. Lazarus lodged in one of the houses for a time. The landlords

"THE TEN ST. GILES." SUMMER TERM, 1880.



A. Goodwin. E. H. Irving. E. B. Poulton. J. B. Chancellor.
D. G. Ritchie. A. H. Bullen. T. R. Clark. J. V. Jones. E. S. Bird.
J. M. Rigg. A. V. Lazarus. 'Putting' stone.

of Nos. 10 and 10a St. Giles' were respectively the buttery-man of St. John's and the butler of Balliol, men who well knew how to make their lodgers comfortable. The two houses were small and picturesque with their grey roofs of Stonesfield slate and their fronts clothed with climbing plants. They stood on the southern side of a broad gravelled court leading out of St. Giles', close to St. John's College. The other side of the open space was bounded by a high wall, of which the eastern end, opposite No. 10a, was built of old grey stone. At its foot grew flowers and shrubs. In this quiet and altogether delightful spot Vir's friends used to gather. We were fond of comparing the distances to which we could 'putt' a large roundish stone which lay in the court; and when a number of us were photographed we took care that the stone should come into the picture. This group of eleven friends was always called 'the Ten St. Giles'', for the sake of the paradox and in remembrance of the spot where we so often met.

It is sad to reflect that this charming retreat is now no more than a memory; for the houses were pulled down in August 1909 in order to make room for the new buildings of St. John's College. But even those for whom the little court held the happiest and tenderest associations cannot doubt that the change is wise and right, for it is life within the walls of a college that, more than all, gives to Oxford her magical and beneficent power.

At the close of the year at 10a St. Giles', in the Summer of 1880, Vir took his First Class in a second Final School, that of Physics. At the time of this, his

last examination, he was just under 24½ years of age. He then migrated to 50 St. John Street, where he lived from Michaelmas Term, 1880, to June 1881, when he finally left Oxford. During this last period of residence he taught private pupils, and in Lent Term and the Summer Term of 1881 was a Demonstrator in Physics at the Clarendon Laboratory under Professor Clifton. In both these terms he lectured upon 'Problems in Elementary Physics'.¹

It is unnecessary to dwell long on Vir's success in the Schools, a subject to which he would himself have attached no great importance. A few incidents connected with this side of his life are, however, of interest.

When Vir was in for Pass Moderations a bad abscess on his hand made writing impossible, and friends took down the answers from his dictation. In the Latin Prose this friend was Charles Edwyn Vaughan, and I well remember Vir's friends laughing with him over the fact that his Pass Prose had been written by a classical scholar of Balliol.²

His sister, hearing from Irving of Vir's pain and discomfort, wrote with tender sympathy and fear, some-

¹ The five changes of residence described in the text were quite clear in my memory. To confirm them and make sure of the dates, I sought and received the kind help of Balliol College and the Delegacy of Lodging Houses.

² Professor C. E. Vaughan confirms my memory of this little episode in Vir's Oxford life, and adds these words:—

'It is quite true that, both then and since, I have been a foe to imposing classics, and especially composition, on men who have shown capacity for other subjects. I thought it a sad waste of Vir's time, to be writing indifferent Latin when he might have been working at natural science.'

what unnecessary fear, lest he should be lonely and companionless:—

November 21st, 1876.

. it made me very unhappy to know that you are so ill just on the eve of an exam. you have prepared for. I offered to start off to you to-day, but of course everyone sat upon me by saying I needed more care than anyone, and many other disrespectful speeches. If your hand becomes worse, and you cannot go in for the exam., had you not better come home at once? What pain you must have suffered! And how lonely it has been for you! I will write again soon. Robert joins me in deep sympathy and earnest hope that you will soon be relieved.

The following letter to his sister, comparing a friend of the London days with the newer friends at Oxford, refers to the examination in Mathematical Moderations. The allusion to Ruskin's lectures in another part of the same letter (see p. 88) proves that it was written early in December, 1877:—

Henry F. Morley [son of Professor Morley of University College, London] has been staying with me from Saturday to Monday. He is not much changed since I knew him: but he is quiet—not like to Oxford undergraduates—not so boyish—perhaps a little over-worked. He is now M.A., B.Sc. of London and will probably soon take his D.Sc. All these exams. are a mistake,—of that I am convinced. I have this term made myself *sure* (alas! too sure) against over-work. My place in the exam. is uncertain but is probably all right.

My friend, Professor E. B. Elliott, F.R.S., who was one of the examiners in the Final Mathematical School in the Summer of 1879, informs me that Vir obtained the

highest marks in Applied Mathematics, and that 'he went deeper into fundamental ideas than was conventional'.

Although he was so successful, I do not think that any of his three First Classes gave him very much pleasure. He saw deeply into the realities of things, and from the first recognized that nothing which could be gained in the Examination Schools would satisfy even the lightest yearning of his ambition.

At the end of his first year, in December 1876, I went through the Final Schools, and I remember feeling rather aggrieved at the calm way in which he maintained that a First Class was hardly a subject for congratulation or satisfaction, but to be taken as a matter of course. His calmness on this occasion was in marked contrast with the warmth of his sympathy thirteen years later, when his friend was elected a Fellow of the Royal Society.

It need hardly be said that we talked and disputed upon every conceivable subject. One of the earliest things I remember was his exposition of the three stages of friendship ;—the first, when friends find little to say because they do not know each other well enough, a period of constrained and awkward silence ; the second, when they have any number of subjects in common, and almost too much to say to each other, a period of hurried and restless discussion ; the third, when they know each other intimately and are content and happy to be together in silence. Our own friendship skipped the first stage altogether and I cannot remember a time when

we felt any discomfort for want of the repose of the third. It was ever there as a potentiality, although the variety and length of our discussions only occasionally gave it the chance of becoming actual.

The appearance of a new book or pamphlet by the author of *Alice's Adventures* was always looked for with special interest in Oxford. My copy of *The Hunting of the Snark* bears the date April 22, 1876, the first Saturday of the Summer Term, Vir's second Term. The rapid development of our friendship is seen in the fact that I reserved the book to read with him, and the next day we strolled in the direction so often taken by Matthew Arnold and Arthur Clough, towards the Cumnor hills. 'In the two Hinkseys nothing keeps the same'; but to our generation the twin villages seem restful in their changelessness, and challenge comparison with the disturbing growth of the 'sweet city' herself. On that Sunday, however, we did not follow the footpath to Chilswell Farm and the 'Signal-elm' which is in reality an elm-like oak,¹ but leaving South Hinksey on our right, passed by the field paths due southward, and read *The Snark*, resting on the stile by the old rifle range. Each copy of the book contained a letter from 'Lewis Carroll' printed as a leaflet, and dated 'Easter 1876',—'An Easter greeting to every child who loves "Alice".' I remember well that Vir was far more impressed by the beauty and pathos of the message than by the humour of the verses.

We had both come of a Nonconformist stock and

¹ See Appendix II, p. 291.

from the same branch of it—Congregationalism. Early in his undergraduate life we discussed the reasons why the young Nonconformist coming to Oxford in a fierce and aggressive mood, became so quickly appeased, and even attended the Chapel services which he might have avoided by going to roll-call. 'It is because the Church is not what he has been taught to believe,' said Vir. A quarter of a century ago the young Nonconformist probably came from a town where a sharp line of social demarcation was maintained between Church and Chapel—one of the 'barbed-wire fences' of Oliver Wendell Holmes which are so much more irritating than stone walls—a far more potent cause of suspicion and dislike, and permanent estrangement, than any difference in opinion about Theology or Church government. The Church has nowhere shown her wisdom more conspicuously than in the genuine effort which she has made and is making to remove these unnecessary and most harmful causes of bitterness. In those days they existed unchecked, at least in the provinces, and the Nonconformist who became one of the democracy of the University found himself breathing a new atmosphere in which his narrowness and intolerance quickly died away. But with all the increased breadth of view, Vir never lost the feeling of just resentment when he saw any symptoms of the old tendency to look down upon Nonconformists, and I have been told of his indignant remonstrance with one very near and dear to him who had spoken contemptuously of the Methodists in Swansea.

In common with the other Scholars of the College

Vir used, from time to time, to read the Lessons in Chapel. I have never been present on such occasions, but have been told that once, when a particularly difficult Lesson had fallen to his lot, a friend said, 'I never really understood that chapter until I heard you read it.' 'It is strange that you should say that,' replied Vir, 'for I did not understand it myself.' No doubt his love of paradox and his sense of humour induced him to make the most of any uncertainty he may have felt as to the meaning of the more difficult passages.

One who has resided in Oxford since October 1873 has had many opportunities of hearing great men preach, and of hearing great sermons: the historic interest of the venerable Pusey, the eloquence of Liddon, the fluency of Farrar, the intellectual elevation, accompanied by the strange mechanical action of Stanley, the daring simplicity of Jowett. He has gone to see what would happen at Carfax when the Bishop of Natal was inhibited from preaching by the Bishop of Oxford, and has heard Colenso's sermon read by the Rector,¹ introduced by the words, 'This is the sermon which the Bishop of Natal would have preached if he had been allowed'; and later in the same day he has heard Colenso preach in Balliol Chapel; for a Bishop's inhibition does not extend thus far. And in both sermons he has looked in vain for any justification for the exceptional treatment.

But of all sermons heard at Oxford none have made so great and so lasting an impression upon me as that

¹ November 29, 1874. The sermon, with an appendix containing the inhibition and other documents, was published by Longmans, Green & Co., London, 1874.

preached in St. Mary's by Professor A. H. Sayce on the afternoon of February 18, 1877; and as I re-live in memory the years of Vir's Oxford life I cannot remember any other sermon which so greatly affected him. Its subject was the evil and danger of individualism, powerful for good as it was admitted to have been in many ways. Appealing to the lessons of history, the preacher urged us not to make an idol of individualism. Strolling in Christ Church Meadows after the service, one of the two friends, a unit in that 'modern Athens' which, in the words of the sermon, 'goes about seeking to read the latest German book and discuss the latest German theory,' began to criticize the conclusions of the preacher. But Vir, always deeply moved by high thoughts clothed in stately language, was not inclined for any such talk. Although more fond of discussion than any man I have ever met, he said:—'What is the use of discussing it? It was too good to discuss.'

I have often wondered why this beautiful composition remained as the sole opportunity of receiving counsel from one who could speak to young men of life and thought and conduct, with the subtle but irresistible command that is born of style. The explanation came a few months back when these memories were being recorded.¹ I wrote to my friend Professor Sayce to ask for the date and to know where a copy of the sermon could be seen, and incidentally spoke of the impression made upon Vir and me. He replied:—

What you tell me is a pleasant surprise to me, for Liddon was the only man from whom in the past I had

¹ In 1903.

heard a good word in regard to it, and Lord Frederick Cavendish, whom I met at lunch at Acland's the following day, asked me if it wasn't aimed at Gladstone! I wish I had known that there was a different opinion about it, as the remarks I heard on the subject had much to do with making me believe that I had made a mistake in taking Orders and in leading me to turn aside from clerical work altogether.

One talk which specially interested and amused Vir—although he affected to be shocked—is quite clear in my memory. Out of the give-and-take of conversation there arose in my mind, and I propounded to him, the idea that the conception of God, being subjective, varied according to the mental equipment and outlook of different individuals—that *Deus* was a large genus, not a single species. Thence naturally followed the attempt to reconstruct the *Deus vulgaris*, and to describe in unflattering terms the attributes of this creation of narrow and ignorant minds. Vir wrote an account of this idea of a *Deus vulgaris* to Alfred Goodwin, his chief friend among the Dons in those early days. The reply from the man I had never met, that it was 'a good thing well invented', gave me, I remember, considerable pleasure.

Vir had but a poor opinion of Herbert Spencer, whom he described as 'parent of a philosophy dead before it was born'. The stimulus and enthusiasm aroused by Spencer's writings had been to me a great educational force from the age of seventeen onwards, and I could not accept his sweeping denunciation, although in later years, from the new point of view which we owe to August Weismann, I became convinced that the great

intellectual superstructure of the synthetic philosophy was founded not even upon the sand.

Searching through old papers and notes I recently came upon a passage which from the opinion itself as well as the egotism, dominant but splendid, which pervades its every line, I know to be Vir's; although it is probably the only one of his sayings which has failed to bring with it the surroundings of place and time in which it was uttered. I had written it down hurriedly in the Union: it is on a scrap of Union paper. He undoubtedly uttered the words in the course of a conversation about some recent materialistic conception of the origin of life:—

I don't complain of their saying they can't understand it: *I* can't understand it. But to say that jumping molecules made it—why he's a fool to say that. *Made* the flowers [this word is uncertain] and the singing of birds and the eye. He's a fool: I say it: he's a fool.

It is interesting to think of the various influences which surround a young man at the University and to attempt to assign to each a value and a place in the moulding of life and character.

Even in the years in fullest subjection to the sterilizing sway of the Examination system—the years more than all others devoted to instructing students too much and educating them too little, to the ideal of conferring on a man of a certain place in the class-list the label of a higher place—Oxford has not been without inspiring teachers, men to help, if necessary to push, a young man of any originality over the Rubicon of his life. For every man

who has in any degree helped to widen the boundaries of knowledge will feel that his life has traversed two very distinct regions: the first, in which he saw his subject with the eyes of others and even then only saw it from without; the second, when with his own eyes he saw it from within. Oftentimes the passage from the one to the other is sudden and is brought about by the arresting shock of revelation. For a revelation it is to a young man of original power when he is first made to realize that everything, after all, is *not* known—to realize it not vaguely, but as a tangible fact of intense personal interest to himself. A large proportion of men with undoubted power *require* such a shock before they can make the passage, and very few can make it at all after they have passed through the susceptible years of early manhood, the great period of intellectual development. Many who might have reached the region of inspiration are held back for ever by the special danger that lurks in academic life—the fascination of accumulating knowledge, not for use in the advancement of learning, but in the spirit of a miser hoarding his gold.

Great is the responsibility of the University and the Colleges to see to it that our English youth come into contact with men who have the power and the will to inspire and to warn. But there are other forces making for education in the broadest sense of the word, which happily are always at work where young men live together—the influence of mind upon mind when all are in the susceptible period of development.

This aspect of University life was thoroughly appreciated by the great Master who preached in Balliol

Chapel from the text ' Man shall not live by bread alone, but by every word . . . ' ¹

Friend sharpening the countenance of friend, the discussion of every subject in the earth and out of it, the life of the Union and of College Societies of every kind taken seriously, the disappointments endured, the triumphs won—these give a man a broad outlook on life, discipline and control, a resolution that is born afresh from every failure, the determination to give of his best to any cause he may undertake, the power of dealing with other men, of doing great things pleasantly and without friction.

And of all the influences on a young man, that of his most intimate friend must ever be one of the great moulding forces of life. For me it was by far the most powerful force. It was wholly strengthening, broadening, inspiring; it has left a debt never to be paid, a memory never to be lost.

¹ I felt sure that memory had not deceived me in recalling this incident, and it has now been confirmed by my friend Mr. R. L. Poole, who was present when the sermon was preached.

CHAPTER IV

JOHN VIRIAMU JONES

LITERARY INTERESTS AND ENDEAVOURS: 1876-1881

SIR HARRY REICHEL has spoken of Vir's literary faculty and gift of expression as 'the admiration and often the despair of men who had made literature their study' (p. 37).

The present chapter tells something of this power in the making,—of varied influences and early efforts. Important among these influences was the correspondence with his sister. Parts of three of her letters written in different years are printed below. The first, dated May 25, 1877, tells of a picnic with a friend:—

We drove over Clyne Common to Caswell Bay, and at every turn in the road we were surprised by some new vision of beauty—sometimes, through the fresh green leaves of the newly, delicately-clothed trees, we saw distant hills darkened by that peculiar haze of blue mist one so seldom sees except in Switzerland; then when we reached higher ground, the sea lay at our feet like an enchanted lake, still and fair, melting into the sky, a silvery veil of mist hiding the line of the horizon, and the little fishing vessels, whose sails glittered in the sunlight, were phantom-ships becalmed under the shelter of that fairy island, the Lighthouse. Then the fields rich in golden buttercups and pink and white daisies, the hedges of may, lilac, and bluebells, which gave us as we passed the incense of a perfume more delicious than

the nectar and ambrosia of the gods, the rapture, the ecstasy of song poured forth by the happy birds who thronged the trees on each side of our path, whose branches of tender green sometimes formed an arch over our heads, and the whole wonderful spirit of Spring, which is so glad that it makes one dream of sorrow, thrilled us with wonder at the marvellous beauty of the world.

I trust you have not taken forty winks over my long account of scenery which you must know by heart—my pen quite ran away with me.

Brynmor and you must have had a pleasant time together—it ought to have done you both good. He greatly needed rest, and perhaps you needed his society, for you must be able to talk more freely to him than to the nearest Oxford friend, and his energetic, vigorous mind—the *action* which so distinguishes him, must beneficially have roused you from your old-world dreams, your calm contemplation of unattainable ideals. But perhaps Bryn was glad to dream too, and to let the silence of the old city fall into his mind to give it rest.

The next letter was written for Vir's twenty-second birthday, January 2, 1878:—

Your birthday follows so quickly on the New Year that birthday wishes and New Year's greetings merge into each other, and must be sent you at the same time. May this be to you a bright and happy year, full of high aspiration and noble achievement, health and strength, fulfilled hopes and delightful events. May the best befall you—the highest destiny be yours—a life that answers to God's call, which gives out the beautiful harmony He waits for when He draws His fingers over the strings of your heart. And may you have very many happy returns of the day, to begin many times with freshness and hope, in the dawn of a new year, a new page of a rich life.

The third letter, written February 29, 1880, recalls the discussions, the prejudice, and excitement of the quarter century that followed the appearance of the *Origin of Species*:—

Our subject at the last Literary Meeting¹ which took place here on Friday evening was 'Evolution', and after an animated discussion, a resolution was passed with a large majority that 'Evolution was worthy of belief'. I had read up, so enjoyed it extremely.

—
— preached this morning for Mr. James: he sent fiery darts into the scientists of the day, unscrupulously misrepresented their theories and denounced their 'theory of dirt', held Carlyle up as a model of philosophic Christianity! and ended with touching sentimentality. It was amusing to hear him about Darwinism. When he entered the pulpit I said to Sam—'he's descended from the same ancestor as the orang—he's too big and ugly to be related to a dear little chimpanzee.' You remember his singular resemblance to a monkey?

The following extracts supply examples of Vir's Oxford letters to his sister on literary subjects:—

Have I told you that Ruskin is lecturing here three times a week? He has a very large audience—till special arrangements were made for members of the University it was impossible to get a seat without going a quarter or perhaps half an hour before the time. He reads most beautifully—his voice is wonderfully musical, full of tenderness, capable at times of the minor cadence of the Welsh, or something very like it. On Saturday he read to us the story of St. Ursula—the good princess, full of all wisdom and the fear of the Lord, who with eleven thousand virgins went on a long pilgrimage;

¹ The Swansea Literary Society. See p. 94.

and they were all slain on their way to visit the Holy Sepulchre by the Soldan of Babylon and a host he had gathered together.

You will find the story as he read it—a version by James Reddie Anderson, of Balliol—in *Fors Clavigera*, November 1st, 1876.

The above letter was dated November 15, 1876, but Mrs. Home finds, from decisive evidence furnished by other parts of it, that the year was 1877. The same conclusion is confirmed by the reference to Ruskin's lectures. Vir was evidently referring to the course delivered, in Michaelmas Term, 1877, on 'Landscape Painting. Twelve Readings in "Modern Painters"'. The story of St. Ursula was read in Lecture III, delivered November 10, 1877. A little later Vir wrote in the letter quoted on p. 75:—

Ruskin has finished his lectures. A few lectures back he preached us a sermon on 'putting away childish things': (1) lack of sympathy; (2) all competition; (3) the scientific mind.

Ruskin gave the last lecture, XII, on Dec. 1. Vir's brief paragraph is of much interest, for it apparently contains all that is now known of Lectures IX-XI, delivered Nov. 24, 27, and 29 respectively. The great Library Edition of Ruskin's works merely states (Vol. xxii (1906), p. 528) that of these three lectures no notes were preserved; while nothing that can be identified with Vir's account is to be traced in the records of Lectures I-VIII, or in XII—the latter published in full in the *Nineteenth Century* for Jan. 1878 (iii. 136-45).

The following letter, probably written in the spring

of 1878, plunges at once into a subject which he knew would interest his sister—an account of Swinburne's well-known criticism and appreciation:—

MY DEAR SISTER,

I read yesterday afternoon about literary women—Swinburne's Note on Charlotte Brontë.¹ If you come across it you will enjoy reading it very much.

The pamphlet (for it is little more) is principally a contrast between George Eliot and Charlotte Brontë, very much to the disparagement of the former. George Eliot, he says, is intellect with a vein of genius, Charlotte Brontë, genius with a vein of intellect. George Eliot's characters (except her children Effie, Tottie, etc., which he thinks perfect) are *constructions*, Charlotte Brontë's are *creations*. He calls Daniel a doll and the book a wax-works.

His four great women of genius, head and shoulders above all their contemporaries, are Charlotte Brontë, Emily Brontë, George Sand, and Mrs. Browning.

With the deepest interest I recall many conversations on literature and especially poetry. Vir had a good but not a great verbal memory, and sometimes chaffed me on the subject.² With mock exaggeration he used to tell how at the reading-party at the Mumbles I sat up with Christopher Brock, each quoting poetry to the other, and how, long after every one else had retired

¹ London, 1877.

² A somewhat unusual development of this rather low intellectual faculty is necessary for one who would write a book of memories. I have quoted on pp. 273-4 a passage from an earlier work, in which it is maintained that the excessive cultivation of the memory, which forms so large a part in the English system of education, is injurious to the growth of the most indispensable part of our intellectual equipment,—the imagination.

each kept saying in turn 'Now you've spoken long enough: just listen to this!'

Vir's ready alertness is seen in the following incident which took place early in our friendship. As a family we were fond of making 'Buried Cities', viz. sentences in which the names of places are hidden although the letters forming the name occur consecutively. On one occasion, during a Christmas Vacation (probably 1876-7) at my father's house in Reading, a young lady rashly maintained that Gower was an almost impossible 'City' to bury. It is in reality a particularly easy word, but no word is easy to bury in a well-made sentence in an instant. Without a moment's hesitation Vir replied 'Go! Wert thou Caesar himself I would say to thee go!'

I well remember when we were reading Shakespeare together in his first rooms at Balliol, he suggested the meaning of some of Hamlet's words to Horatio and Marcellus, an interpretation which he had himself learnt at the Lyceum from Irving. In the fifth Scene of the first Act, Hamlet, carried away by rage and grief, is about to divulge the whole story he had learnt from his father's ghost, and begins fiercely, 'There's ne'er a villain dwelling in all Denmark'; then seeing a look of intense interest in the eyes of the listeners, he takes warning and turns the sentence to its impotent conclusion, 'but he's an arrant knave.' Vir keenly appreciated the acting of the first grave-digger in the churchyard scene, who became, as he told us, the central figure on the stage, attracting the whole attention of the audience. More than once I have heard him render this part as he had witnessed it at the Lyceum.

Whenever we met in after years Vir would always tell me of books which he had recently read. A casual meeting in the Savile Club was the occasion for a sketch of Oscar Wilde's *Picture of Dorian Gray*, which had interested him deeply. On the other hand, 'a bad atmosphere' was his summary of the impression produced by one of the plays, I think 'Lady Windermere's Fan'. William Morris's *Sigurd the Volsung* and Matthew Arnold's 'Margaret' he spoke of on two visits to our house at Oxford.

Vanity Fair he spoke of as an immoral book because the good characters were so stupid, the bad so clever and full of interest.

Of single poems especially admired by Vir, I remember Wordsworth's 'Intimations of Immortality' and Byron's 'Waterloo'.

Tennyson did not appeal to him very greatly, a point of strong difference between us. The only reference to his poems which comes back to me concerned 'The Princess', on which Vir's comment was characteristic. He spoke with interest and a half-amused sympathy of the conception of the students, with their lofty and aloof ideals, becoming just delightful ordinary women as soon as they were compelled by the force of circumstances to be nurses. I have also heard him say that power in any form was the quality in man which more than any other attracted woman.

I do not think he had begun to read Browning as an undergraduate, but later on Browning became more to him than any other author. He first talked to me of the poems in his rooms at 10a St. Giles', describing

and then reading the well-known 'One word more'. In this, as in other writings, it was the underlying thought, rather than the expression, which charmed him. I shall never forget the last time at which he spoke to me of literature, or the depth of feeling with which he said the lines from 'By the Fireside':—

Oh, the little more, and how much it is!
And the little less, and what worlds away!

This was at Easter, 1898, when he was staying with us at St. Helens Cottage, in the Isle of Wight.

The fun of Bret Harte's 'Sensation Novels Condensed' always strongly appealed to him. He was especially delighted at both the parodies of French writers, *Fantine* and *La Femme*, and at this passage in *Mr. Midshipman Breezy*, which he used often to quote:—

'If you please, sir,' I asked, tremulously, 'I should like to be introduced to the gunner's daughter!'

'O, very good, sir!' screamed Captain Boltrope, rubbing his hands and absolutely capering about the deck with rage. 'O d—n you! Of course you shall! O ho! the gunner's daughter! O, h—ll! this is too much! Boatswain's mate!' Before I well knew where I was, I was seized, borne to an eight-pounder, tied upon it and flogged!

Miss Mix, the parody of *Jane Eyre*, amused him intensely: he was especially pleased over Rawjester, 'as he absently tied the poker into hard knots with his nervous fingers.'

He also quoted with great appreciation a passage from the scene in the jeweller's shop in Bret Harte's parody of *Lothair*:—

'Each of these pearls, my Lord, is worth fifty thousand guineas,' said Mr. Emanuel Amethyst, the fashionable jeweller, as he lightly lifted a large shovelful from a convenient bin behind his counter.

'Indeed,' said Lothaw, carelessly, 'I should prefer to see some expensive ones.'

Then he would laugh heartily at the jeweller's reply when Lothaw, thinking he might be suspected of stealing, said, 'You can search me, if you like.'

'Enough, my Lord,' said Mr. Emanuel Amethyst, with a low bow, 'we never search the aristocracy.'

Vir was very fond, too, of the parodies of the *Bon Gaultier Ballads*. We used to read his copy together in his first set of rooms at the top of No. 6. Indeed, my memories of our common interests in literary subjects are mainly associated with these rooms.

Vir was devoted to his books, and his sister has told me that, in the pathetic weakness of his last illness, he rubbed the leather covers of some of them and said, his eyes filling with tears, 'You see, if I cannot read them, I like to do what I can for them.'

Of all the conditions necessary for the highest achievement—hardly ever to be attained without time and experience for the full development and fruitful exercise of power—two, health and a sufficiency of means, stand on a very different level from the others. It is a pathetic and even a humiliating thought that the noblest effort of the human intellect can be, and often is, brought to a premature end for the want of some indispensable condition supplied in abundance to numberless inferior minds.

The remaining pages of this chapter are concerned with papers written for a literary society at Vir's home in Wales. They are early efforts made in vacations during the first part of his Oxford life.

The following note on the Swansea Literary Society has been kindly drawn up for me by Mr. S. Home :—

There happened to be in the Swansea of the seventies a number, unusual perhaps in a country town, of men and women who were interested in literary subjects. They were for the most part already known to one another ; and a social club or circle, intended to combine friendly intercourse with serious literary effort, was initiated by Mr. Sidney Hartland, now well known as a past President of the Folk-lore Society and author of the *Legend of Perseus*,¹ and Mrs. Hartland. The members met at their respective houses in turn, under strict sumptuary and other regulations, intended to prevent any undue burden on the hostess of the evening, and any encroachment of the purely social upon the working part of the time. All the communications were original, and most of them of considerable merit, the lady members contributing greatly, both by their papers and their part in discussion, to the success of the reunions.

Mrs. Home tells me that publication of papers read to the Swansea Literary Society was intended but never achieved. The idea is now in part carried into effect by the appearance of the three following papers, the third certainly, the others probably, written during Vir's first year at Oxford and before he was twenty-one.

¹ Three vols., London, 1894.

Mrs. Home describes the recovery of manuscript in a letter of April 25th, 1910:—

On receiving your letter I spent the day searching an old cabinet of eight drawers all stuffed with old letters and manuscript. I send two papers which were read at our Literary Society soon after the date (October 10th, 1876) at which we read the essay on 'Ulalume'. They show at least imagination and aspiration, traits which deepened in Vir's later life.

A SOUL'S DREAM

Behold I was a free spirit: and I fell into a sleep, troublous and noisy, and in my sleep I dreamed a dream. And the dream was this. I was in a room of a great palace, but I knew not that it was I, and thought not upon what I had been. And there were with me others like unto me. And we were all painting, painting, painting on the sides of the room. And of the pictures no two were alike; and when I tried to make mine like unto some great and beautiful one, behold! a blot came upon it and I could not. And while I was painting I looked round upon the room. And it had three doors—one that opened to let those in that came as I had come, a side door leading out where we knew not, and another door leading to the next room in the great gallery. At this last door we all aimed: and the side door we dreaded: for many vanished through it and we saw them no more.

And when I had passed into the next room, I saw that it was like unto the former, but the paintings changed: and the change was very slow, so that it was hardly perceptible. And I painted and painted, and passed on through many rooms. But through a room once passed I could pass no more.¹

¹ Vir had placed a '?' to this sentence, as if doubtful whether he should read it.

And in my pilgrimage if I saw a painting that was beautiful I longed to make my painting like it, but the trial seemed always in vain. For when with great toil and pain I drew near the end, the fascination of some picture of evil would overcome me; and with one sweep of the brush the beauty would vanish, and swift—swift as the course of the lightning—on the canvas was the picture of evil, and before it horror-stricken and aghast was I.

So striving I went on from room to room: and the number of the rooms I went through was in all three-score and ten.

And I feared greatly and was in deadly terror, for I was to pass through the side door. And while I was in fear I awoke and behold it was a dream.

I have spoken of his interest in *The Picture of Dorian Gray*, but I did not know when he talked of it, that Vir himself had effectively used the simile so elaborately developed in the volume—life symbolized in a picture.

THE TOWER OF BABEL AND PHILOSOPHERS

In days of old they tried to build a tower
Huge, vast, immense, the mountains over-topping,
So that they might be safe from any Deluge
That God might send for their iniquity.
And they said, 'Come and let us make ourselves
A name, and build a city and a tower
Whose top may reach unto the heavens and be
A shelter strong for us and for our children.
Go to, let us make bricks and burn them throughly
And build lest we be scattered o'er the earth.'
But when they seemed advancing in the work
It sudden stopped, for there was in their speech
A strange confusion come. One understood
Not what another said or called to him.
The bricks they had for stone and slime for mortar

And all else needed by them for their work
No longer had one single name but many.
When one called this, they brought him something
 other
He did not want, and thought he had not called for ;
And then came wrangling and recrimination
And bitterness that was by no means lessened
Because they could not understand the taunts
Made in a language that was not their own.
And so there rose a strange and wild commotion
And, as the Sacred Writing saith, they ceased
To build the city and heaven-touching tower,
And they were scattered broadcast o'er the earth,
These builders of the tower that is proverbial,
Named Babel on account of the commotion.

Philosophers have long been trying, too,
To build a chosen city and a tower ;
And they have said, 'Come let us make ourselves
A name and build a system that may be
A shelter unto us and to our children.
Go to, let us get knowledge, try it throughly,
And build lest we be scattered [through a world
Where all] is false, and when the Deluge comes
Of our misfortune, oftenest brought on
By our own wickedness or ignorance,
We have no shelter but be drowned and sink
Beneath the waters that shall rush upon us.'
And they have laboured hard to build the Temple—
Truth's Temple that shall rear its head to heaven.
But when they seem advancing in the work
There comes a sudden stop, a blight upon it,
A strange confusion in their speech, a Babel,
Wrangling, and bitterness, recrimination,
The heat of controversy, quarrelling,
Some pulling down the building of the other,
And some rebuilding what has been pulled down.
Names many for one thing they had of old,

And now they have for many things one name.
So it is now.—Will it be so always?
We do not know—the end, it is not yet.

I have already said that this poem was an early effort, and probably a hurried effort. But it must not be supposed that the irregularities of metre would be as obvious when Vir read it as they are in the printed lines. He could not but know his own power as a reader, and that it might be trusted to interest his hearers so deeply in the thought that they would become indifferent to errors of form. I have spoken of his reading on p. 79, and in the following paragraph his sister tells of the resistless appeal it might become when he was deeply thrilled by a great poem :—

One evening at Vir's house in Cardiff, when I was on a visit there, some intimate friends came to dine with them. After we retired to a room which my sister-in-law's artistic taste had made rare and beautiful, Vir read to us in the soft glow of the lamplight Capon-sacchi's defence in *The Ring and the Book*, which he thought one of the most pathetic speeches in modern literature. We were at once arrested, the interest deepened to intensity, and towards the end, his low, clear, modulated voice became almost intolerably sweet,—pitiless in perfection. The silence could be felt, faces were pallid with emotional suspense. When he ceased there was a long, long pause, until, as if waking from a dream, we murmured the usual thanks ; and when we felt quite ourselves again, we gave him the praise and appreciation he deserved.

In his first Long Vacation, Vir and his sister wrote for the Literary Society an essay on 'Ulalume',—that weird,

mystical masterpiece of America's greatest poet.¹ Edgar Allan Poe's other poems, as well as his Essays, also appealed to Vir strongly, but of 'The Conqueror Worm' he used to say that 'the poem ought never to have been written; no one ought to be allowed to write like that'.

During the following Term he explained to me the central idea of the essay,—the conception of the lover led by his new love to the grave of the old.

Vir had a very strongly developed sense of humour and thoroughly enjoyed the fun of a clever parody, even though it were of a poem which had stirred his emotions to their depths. I remember that after reading 'Ulalume' itself we laughed loudly over Bret Harte's splendid but outrageous parody, 'The Willows.'

I realized that Vir had been keenly interested in the writing of the essay, and was told by one of his Swansea friends at the Mumbles reading-party of the great impression it had produced at the Society. But the paper itself I had never seen, and was much pleased when, in the present year, 1910, Mr. Home, after long searching, succeeded in finding the original copy.

Mrs. Home has very kindly recalled the circumstances under which this beautiful composition was written:—

Vir and I each promised a paper for the second meeting of our Literary Society, which was to be held at my father's house. He came to me a day or two before the

¹ Professor Goldwin Smith told me that in his opinion other American poets had written not poetry but 'rhetoric in rhyme'. In Poe he recognized the feeling and the passionate abandon of the true poet. He said this in the autumn of 1896 when we were together at the sesquicentenary of Princeton University.

date (Oct. 10, 1876) fixed for the Meeting, in brisk and sunny mood, and asked me if mine were ready.

I said 'No, nothing occurs to me, and you?'

Then he, 'We must do something at once, you know. I have an idea—let's write together and make the audience guess our parts. That will be great fun! I've just been reading Poe's poems. You know them all well. I like 'Ulalume'. I will do the sentiment and tragedy, and you shall analyse and criticize Poe's elaborate methods of composition.'

So we set to work, I taking notes, and he pacing up and down, giving his rendering of each verse. After about two hours he said—

'I must be off now, but I'll look in again this evening after you have set it all down in your own way.'

I worked hard until he came again, and he was delighted with the result. He read it at the Meeting, and after the usual discussion was over, he made every one guess, and beamed at me confidentially and triumphantly when the mistakes which he expected were made. In fact he seemed to get more pleasure from this than from the very kind reception accorded to the essay. He preferred at the time to look on the whole thing as an elaborate joke.

All this was certainly not very respectful to the learned members! Later on we reformed, and treated our compositions more seriously. (Oct. 13, 1910.)

In order to facilitate reference the essay is preceded by a reprint of the poem.

ULALUME

The skies they were ashen and sober;
 The leaves they were crispéd and sere—
 The leaves they were withering and sere;
 It was night in the lonesome October
 Of my most immemorial year;

It was hard by the dim lake of Auber,
 In the misty mid region of Weir—
 It was down by the dank tarn of Auber,
 In the ghoul-haunted woodland of Weir.

Here once, through an alley Titanic,
 Of cypress, I roamed with my Soul—
 Of cypress, with Psyche, my Soul.
 These were days when my heart was volcanic
 As the scoriac rivers that roll—
 As the lavas that restlessly roll
 Their sulphurous currents down Yaanek
 In the ultimate climes of the pole—
 That groan as they roll down Mount Yaanek
 In the realms of the boreal pole.

Our talk had been serious and sober,
 But our thoughts they were palsied and sere—
 Our memories were treacherous and sere—
 For we knew not the month was October,
 And we marked not the night of the year—
 (Ah, night of all nights in the year!)
 We noted not the dim lake of Auber—
 (Though once we had journeyed down here)—
 Remembered not the dank tarn of Auber,
 Nor the ghoul-haunted woodland of Weir.

And now, as the night was senescent
 And star-dials pointed to morn—
 As the star-dials hinted of morn—
 At the end of our path a liquescent
 And nebulous lustre was born,
 Out of which a miraculous crescent
 Arose with a duplicate horn—
 Astarte's bediamonded crescent
 Distinct with its duplicate horn.

And I said—'She is warmer than Dian:
 She rolls through an ether of sighs—

She revels in a region of sighs:
 She has seen that the tears are not dry on
 These cheeks, where the worm never dies,
 And has come past the stars of the Lion
 To point us the path to the skies—
 To the Lethean peace of the skies—
 Come up, in despite of the Lion,
 To shine on us with her bright eyes—
 Come up through the lair of the Lion,
 With love in her luminous eyes.'

But Psyche, uplifting her finger,
 Said—'Sadly this star I mistrust—
 Her pallor I strangely mistrust:—
 Oh, hasten!—Oh, let us not linger!
 Oh, fly!—let us fly!—for we must.'
 In terror she spoke, letting sink her
 Wings till they trailed in the dust—
 In agony sobbed, letting sink her
 Plumes till they trailed in the dust—
 Till they sorrowfully trailed in the dust.

I replied—'This is nothing but dreaming:
 Let us on by this tremulous light!
 Let us bathe in this crystalline light!
 Its Sibyllic splendour is beaming
 With Hope and in Beauty to-night:—
 See!—it flickers up the sky through the night!
 Ah, we safely may trust to its gleaming,
 And be sure it will lead us aright—
 We safely may trust to a gleaming
 That cannot but guide us aright,
 Since it flickers up to Heaven through the night.'

Thus I pacified Psyche and kissed her,
 And tempted her out of her gloom—
 And conquered her scruples and gloom;

And we passed to the end of the vista,
 But were stopped by the door of a tomb—
 By the door of a legended tomb ;
 And I said—'What is written, sweet sister,
 On the door of this legended tomb ?'
 She replied—'Ulalume—Ulalume—
 'Tis the vault of thy lost Ulalume !'

Then my heart it grew ashen and sober
 As the leaves that were crispéd and sere—
 As the leaves that were withering and sere ;
 And I cried—'It was surely October
 On *this* very night of last year
 That I journeyed—I journeyed down here—
 That I brought a dread burden down here !
 On this night of all nights in the year,
 Ah, what demon has tempted me here ?
 Well I know, now, this dim lake of Auber—
 This misty mid region of Weir—
 Well I know, now, this dank tarn of Auber,
 This ghoul-haunted woodland of Weir.'

ULALUME. OCTOBER 10TH, 1876.

NOTES ON EDGAR ALLAN POE'S POEM, 'ULALUME,'
 BY ANNIE MAINE AND J. V. JONES.

[Read by J. V. Jones.]

Poe says in one of his essays that beauty is the sole legitimate province of the poem, that all experience having shown that the tone of the highest manifestation of beauty is a tone of sadness, melancholy is the most legitimate of all the poetical tones.

This belief of his in the power of melancholy to fascinate and elevate the mind accounts for the air of gloom which pervades nearly, if not quite, all his poems. In some it is a shade of sorrow which keeps real sorrow

far away—in others a wild unrestrained indulgence in deep grief for some lost happiness, and some are pictures of the anguish of undying remorse.

In certain of them, 'The Raven' and 'Ulalume' especially, our author adds to his prevalent tone of sadness an air of weird, sombre mystery, suggesting more than is expressed, and giving the vagueness characteristic of melancholy.

Poe is considered by some to have carried this to such an extent in 'Ulalume' as to have lapsed into the utterly incomprehensible, but we hope the following explanation from the point of view of the narrator will satisfy.

Looking back at the years of his life there is of all one 'most immemorial year', a dull long year of sorrow, remembered not by its events, but by its unbroken dead grief-paralysis.

In it one night stands forth, breaking the darkness of its uniform misery by a gleam of the sunshine of hope.

In the gloom of the Autumn night, anniversary of calamity, though he knew it not, he is walking to and fro on his dismal path, the 'alley Titanic of cypress,' communing with Psyche, his soul.

Night is 'senescent', and darkest, and the star-dials hint of morn, when there rises before him and Psyche, the smiling Astarte, the love-star.

He greets it with the impetuous joy of the criminal reprieved, of the shipwrecked mariner rescued. But Psyche forgets not the past, and trembles for the future, fears the new hope is nought but a will-o'-the-wisp that will guide him astray:—

'Sadly this star I mistrust—
Her *pallor*¹ I strangely mistrust:—'

But he is reluctant to believe, and replies, 'This is nothing but dreaming'; will argue with her and convinces her.

¹ Italics by authors of essay.

And they pass to the end of the vista to draw near to the beauteous star: and lo! a tomb! 'Tis the vault of thy lost Ulalume!' is the cry of his terrified soul.

Then the day and the place are remembered, and he bows in subjection to Psyche.

The birth of the new love has led back to the tomb of the old; the time-bandages are torn off from the wound that was healing. The racking pain comes anew; the aching heart and the weary spirit have found no rest in Astarte.

This seems to us a sufficiently accurate rendering of what was in the poet's mind when he wrote. Let us more particularly note the working-out of the idea—the fixing of the hour and the night and the year and the place.

The hour—'And now, as the night was senescent And star-dials pointed to morn'. Let us note that in accordance with the old proverb 'When night is darkest dawn is nearest'; this is too the *darkest* hour of the night; and does it not symbolize the gloomiest spiritual state?

The night:—

The skies they were ashen and sober;
 The leaves they were crispéd and sere—
 The leaves they were withering and sere;
 It was night in the lonesome October

It is thus in October, saddest and loneliest of all months in the year.

Again the year—'Of my most immemorial year'. 'Immemorial' mark, not because of its distance in the past, as dictionaries might lead us to suppose; but because of no part of it has he definite memory except of this one night. For intellect and heart had been paralysed by the shock of his great calamity. This which to some is inexplicable, to us seems most subtle.

The shock had shattered his memory: he took no count of day or month or season:—

Our thoughts they were palsied and sere—
Our memories were treacherous and sere—
For we knew not the month was October,
And we marked not the night of the year—

This is a wonderful expression of the blank inability to realize the desolation caused by a sudden blighting shock.

The scene:—

It was hard by the dim lake of Auber,
In the misty mid region of Weir—
It was down by the dank tarn of Auber,
In the ghoul-haunted woodland of Weir.

Here we may notice the abundant use, especially in the proper names, of the letter 'r', which, as capable of most protracted emphasis, Poe thinks peculiarly fitted for such descriptions. By his own confession, it was for its effectiveness that he made choice of the word 'nevermore' as the refrain in 'The Raven'.

Again—

Here once, through an alley Titanic,
Of cypress, I roamed with my Soul—

'cypress', emblematic of death, expressing the gloom of his thoughts, and 'Titanic' the power they had over his mind.

Next, the description of the rising of the star:—

At the end of our path a liquescent
And nebulous lustre was born,
Out of which a miraculous crescent
Arose with a duplicate horn—
Astarte's bediamonded crescent
Distinct with its duplicate horn.

The star is Astarte, or Venus, symbolizing the dawning of a new love.

In the next verse how beautiful is the interweaving of pity with the love. The love that he hopes, nay, believes, is coming to him, is not selfish :—

She has seen that the tears are not dry on
 These cheeks, where the worm never dies,
 And has come past the stars of the Lion
 To point us the path to the skies—
 To the Lethean peace of the skies—
 Come up, in despite of the Lion,
 To shine on us with her bright eyes—
 Come up through the lair of the Lion,
 With love in her luminous eyes.

What does the Lion symbolize? It is the strength of the heavy, oppressive half-remembrance of the love that is gone, already partially recalled by the birth of the new love. But the partial recalling reacts, and the deepest soul of the man hesitates and would fly, feeling that—

There was a time when meadow, grove, and stream,
 The earth, and every common sight,
 To me did seem
 Apparell'd in celestial light,
 The glory and the freshness of a dream.¹

compared with which the present is wan and pale and sickly :—

But Pysche, uplifting her finger,
 Said—'Sadly this star I mistrust—
 Her pallor I strangely mistrust :—
 Oh, hasten!—Oh, let us not linger!
 Oh, fly!—let us fly!—for we must.'

The expression of her terror and agony is peculiarly fine :—

In terror she spoke, letting sink her
 Wings till they trailed in the dust—
 In agony sobbed, letting sink her
 Plumes till they trailed in the dust—
 Till they sorrowfully trailed in the dust.

¹ I have already spoken on p. 91 of Vir's love for Wordsworth's poem on 'Intimations of Immortality'.

Spite of the voice of Psyche, who warns but will not argue, he will follow with passionate persistence the peace-promising star:—

Thus I pacified Psyche and kissed her,
 And tempted her out of her gloom—
 And conquered her scruples and gloom ;
 And we passed to the end of the vista,
 But were stopped by the door of a tomb—
 By the door of a legended tomb ;
 And I said—‘ What is written, sweet sister,
 On the door of this legended tomb ? ’
 She replied—‘ Ulalume—Ulalume—
 ’Tis the vault of thy lost Ulalume ! ’

It promised peace, and has brought him to the tomb.
 The memory half-dead is revived:—

And I cried—‘ It was surely October
 On *this* very night of last year
 That I journeyed—I journeyed down here—
 That I brought a dread burden down here ! ’¹

It is the coming to himself, the breaking up of the fool’s paradise ; he may have injured his love, and he sees it now ; may have rejected her, and mourns it now ; may have killed her,² and realizes now the

¹ I remember that Vir, in speaking of the interpretation set forth in the following paragraph, laid stress on the word ‘ dread ’ in

‘ I brought a *dread* burden down here ! ’

² We are reminded of lines published twenty-three years after this essay was written:—

The man had killed the thing he loved,
 And so he had to die.

Yet each man kills the thing he loves,
 By each let this be heard,
 Some do it with a bitter look,
 Some with a flattering word,
 The coward does it with a kiss,
 The brave man with a sword !

The Ballad of Reading Gaol.

By C. 3. 3. [Oscar Wilde]. London, 1899.

desolation that is inevitable and cannot be broken, the remorseful loneliness that no angel light of hope shall illumine, a loneliness made vivid by the lines :—

'Well I know, now, this dim lake of Auber—
This misty mid region of Weir—
Well I know, now, this dank tarn of Auber,
This ghoul-haunted woodland of Weir.'

Note.—Lines 21 and 22 on p. 97 ran, in the original MSS.,—

And build lest we be scattered *o'er the earth*
Of what is false, and when the Deluge comes

The words in square brackets on p. 97 were suggested by Mrs. Home in place of those I have here italicised.

CHAPTER V

JOHN VIRIAMU JONES

SHEFFIELD, 1881-1883: CARDIFF, 1883-1901

THE first phase of our friendship closed with Vir's last Examination in the Summer of 1880. Up to that time we were still in the stage of development, happily prolonged until well into the twenty-fifth year. We had both worked hard, but still had leisure in which to influence each other.

I was married in 1881, a few months before Vir left Oxford to enter upon a great administrative work as Principal of the Firth College, Sheffield. In the following year he married the cousin of his Balliol friend, J. T. Wills, who introduced him to the delights of Alpine climbing. He first met his future wife when he was staying at the Wills's chalet, The Eagle's Nest, in Savoy.

I remained in Oxford, striving to do as much research as possible in the scattered remnants of time left from an almost continuous round of teaching. The rush of life, with its supreme interests and exciting struggles, had begun for both of us. Henceforth we were to meet as hard-working preoccupied men, each feeling that his own problems were about as much as he could manage.

The second period of friendship between hard-worked men can never be like the first—passed as it is in the period of development and in the enjoyment of time, the most lavish of all the gifts of youth. When friends meet in the later stage it must often happen that one or both are bound by inexorable claims. In youth no claims are inexorable, except, perhaps, those of friendship itself.

I have already spoken more than once of the unique system by which the influence of mind upon mind is promoted in our two ancient Universities. This influence is strongly encouraged to act under the most favourable conditions at that very period of youth when it can best be exerted and received. It is a period when young men, wherever they have or can make the opportunity, must inevitably exert and receive it, as we see in the secret societies and clubs of American, and the students' corps of German Universities. All that these organizations can do is done more efficiently and with infinitely less of the special dangers of class and clique by the Colleges of Oxford and Cambridge.

The sea has often been used as a metaphor in the realm of Psychology, and I do not hesitate to use it again. The ship of thought is driven easily and quickly when it traverses a smooth unbroken expanse, but how different is the distance achieved and the power required when the surface is broken. And the calm may be dispelled by almost any cause, even by the presence of the dearest friend. Yet there are times when, whether with effort or with ease, the ship *must* travel.

The imperative demands spoken of in the last para-

graph may be illustrated by a different metaphor. I find it among papers written in 1879 and read by Vir himself. Certain simple forms of life possess the power of surrounding themselves with a hard protective outer covering, beneath which they lie motionless and dead to external influences. And yet those are the very times when the most active vital changes are taking place, changes which will presently lead to the bursting forth of new life. So, too, when thought is insistent or when memory asserts its claim, we withdraw ourselves from the outer world and from all those influences to which at other times we freely and gladly yield ourselves. At such times we throw around our thoughts and feelings a mental 'cyst', and here too, beneath an outer shell, more than ordinary activities are at work. Having eyes we see not, and yet with enduring all-inclusive gaze, may seem to be piercing to the very heart of infinity.

The following paragraph remains just as it was written in 1879:—

At such moments it is with a strange and most unpleasant recoil that the present sometimes forces itself upon us and will take no denial. The vision vanishes: the past which we were re-living with perhaps even deeper joy than we felt at the time itself—for are not past experiences sifted by memory and their happiness retained?—is no more; and, in an instant, with hard, bitter contrast, the stern present is before us. And what of the future? What, in days to come, will memory make of to-day?

Well, after a lapse of thirty-one years—for I am writing this paragraph in 1910—I can only say that the

world must have seemed rather gloomy to the young man who wrote the words,—so gloomy indeed as to have led him into exaggeration. There is, nevertheless, considerable truth in the statement as a whole, and it explains why friendship during the years when the weapon of thought is being used can never be quite the same as friendship during the years in which it was forged.

In the Cardiff days, when Vir could take a brief respite from his arduous work, he found it restful to visit his sister and her husband in their house set on a hill, with the wide sweep of Swansea Bay for view from east to west. And the inevitable change that is wrought when any life worth calling a life has well begun, made itself felt in his letters to her, telling of the need for rest. 'This is a letter without ideas, of the good old schoolboy kind: it represents its exhausted writer whom committee meetings have emptied,' is the postscript of a letter written in 1892, in the evening of a long summer day spent 'at meetings from morning till 10 o'clock'.

And in the same summer he wrote:—

Do you know what it is to have your head so full of business as to be unable to write a real letter? I expect not—your letters are always so much all they should be. But it is my case this morning. The College is revolving all round me—unfinished premises, builder's materials still about, and far too many students for the size of the building. That is the condition of things, and it is giving me great new matter for too much thought.

Yet who would have it otherwise? The man with

too much to do is happier, as well as more useful to the world, than the man with too little.

'Don't think of me as discontented; I am happy enough in my work. I hope you will some time come and see' Vir wrote on March 4, 1886, just before hurrying off to a lecture, and after a whole afternoon 'at committee meetings for utilizing the Welsh Language'.

Furthermore, the happy mean, even if attained, is rarely satisfactory. The man who bases his life upon the rule 'thus far will I work and no farther' is not likely to be the man whose labours are of much value to himself or to anybody. Therefore it is that, apart from the history of the work of a man's life, there is often more of interest and instruction to be gained from the records of the years of development than from those of maturity,—from the years of enjoyment, or even, as they may have appeared, of drift, than from those of performance.

The letter of which the postscript is quoted above was a message of sympathy to his sister in the fatal illness of her husband. 'Nothing but profound religious faith', he wrote, 'gives to the bitter clouds of life's horizon a silver lining. This is the result of my observation, uttered in no sentimental spirit.'

When the end came on March 9, 1886, Vir wrote :—

What can one say to comfort you in sorrow? Relations and friends had best content themselves with tender assurance of love and affection and readiness to help you—and Penmorlan who has lost his father.

And writing of the man who had died he spoke :—

Of his gentle unaffected kindness, and his unselfish

generosity, fitting him, as father used to say, to dispense hospitality in regal fashion had he owned a castle. He was literally too amiable, too full of the milk of human kindness to be successful in the struggle for existence . . .

The letter concludes: 'I almost wish I were more familiar with sorrow that I might comfort you better.'

Towards the close of his residence in Oxford, Vir naturally thought much of a future career, and went to seek advice from the great man who was Master of his College. Vir desired the opportunity of entering upon the road for which the whole of his University life had been a preparation, but Jowett without a moment's hesitation said—'Be a physician.' The younger man knew himself too well to think of following this advice. 'I was hoping to get some work in Physics,' said he: 'Yes, Physics,' replied Jowett, who must have been thinking of something else. Vir's account of this interview greatly interested his friends, and the laconic phrase in which such decided convictions were expressed was for a long time remembered as one of Jowett's latest sayings.

The first post sought by Vir was that of secretary to the 'City and Guilds of London Institute'. He realized the great importance of the work and would have been glad to avail himself of so large an opportunity. His sister wrote on Feb. 29, 1880:—

Mon has shown us your application for that London post (I do not clearly understand what it is) and I am delighted with the testimonials. Whether you get the

appointment or not, these letters will be something to have won from such eminent men. I am prouder of you than ever! If you should get it, how splendid!

He was not successful in this application, and Philip Magnus¹ was appointed secretary. On May 19, 1831, Vir was made Principal of Firth College, now University College, Sheffield. Vir's feelings at leaving Oxford were expressed in a letter written July 2, 1881, from his rooms in St. John Street:—

I spent this morning in tying up letters and papers into bundles—preparatory packing. I feel very sorry at leaving Oxford somehow: I suppose because the place is so beautiful and more than ever so in such summer weather as to-day.

He had undertaken a tremendous responsibility for a man of twenty-five. He not only became Principal of an institution which had been a failure but also accepted the Professorship of Physics and Mathematics, and promised to teach Geology as well!

'I seem scarcely to have a minute to myself. The once idle and careless Viriamu does not know himself,' he wrote to a friend in September, at the opening of his first session.

I learnt of the signal success of his administration in this position from the Rev. W. H. Dallinger, F.R.S.² He had grave doubts, he told me, of the very existence of the College before Vir's appointment, but the power

¹ Sir Philip Magnus, J.P., M.P.

² Dr. Dallinger told me this when he visited Oxford, May 21, 1883, to lecture before the Ashmolean Society on 'An hour with the modern microscope, with special reference to the origin and level of the least and lowest forms of life'. See also pp. 249, 250.

of organization and of inspiring enthusiasm had wrought such change that success and efficiency were now assured. It had become merely a question of time. The greatest difficulty Vir had to contend with was the name of the College. As he expressed it:—

Mark Firth was a strong man who rode rough-shod over his relations as well as other people, and they naturally say: 'Why should we contribute to the memory of Mark Firth?'

When it was decided to found a University College in South Wales there was considerable rivalry between the two great centres, Swansea and Cardiff. The selection, on Monday, June 18, 1883, of a native of the Swansea district as the first Principal of the College at Cardiff, was therefore singularly happy, tending as it did to soften a grievance. This was Vir's opinion, and it pleased him much, he told me, to think that he should thus be able, even though by an accident, to promote friendliness and unity in the land of his birth.

This special qualification and another with an appeal even more insistent were described in words of much beauty by Dr. Vaughan, Dean of Llandaff and Master of the Temple, in an address to the Cardiff Eisteddfod, in August 1883.

We shall suffer no jarring interests to divide us. South Wales and Monmouthshire shall have one heart and one soul in this thing. Cardiff and Swansea are one. Swansea has given the new College some of its most honoured and prominent men. What is yet more delightful is that young Welshmen have heard the clarion blast in distant homes, and are throwing up English positions that they may come to the succour of

their own Wales in this hour of her need and of her hope. One such man is the Principal of the new College—the honoured son of an honoured sire, who was in his day an eloquent pastor and preacher of a leading Welsh Communion, and who drops his mantle, from the Paradise of his rest and of his reward, upon a beloved youth, bearing his name and destined (God grant it) to carry on in a new form, and so to complete and finish, his work.¹

Vir wrote to his sister, August 21 :—

Dean Vaughan's words were certainly very beautiful. One cannot hope to meet with a sentence or thought more inspiring in the whole course of one's life.

Professor C. E. Vaughan recalls a speech at Cardiff in which his uncle Dean Vaughan spoke of 'sincerity as being written on' Vir's brow, and 'courtesy on all his acts'.

Professor Vaughan writes, October 20, 1910 :—

I know to a certainty that my uncle had not only the strongest admiration for his abilities, but a true affection for him, as a man.

I remember Vir telling us with great glee of the way in which one of the early difficulties at Cardiff was surmounted. A sum of money had been voted in Parliament, and for some particular reason punctual payment was essential. Other payments already overdue were, I think, depending upon it. The Treasury was appealed to in vain by the College and by Parliamentary representatives. There was still delay. Finally, almost in despair of getting the grant in time to be of value, the

¹ *Western Mail*, Aug. 10, 1883.

Member who had charge of the matter went to his chief. Gladstone immediately wrote across the paper

LET THIS BE DONE

W. E. Gladstone.

There was no delay after that.

When Vir first came to see us after he had ceased to reside, I remember entering a protest against the alteration in his appearance caused by the removal of his moustache. I told him that his brother Leif at Trinity was more like Vir than Vir himself, and that a man had no right to take such liberties with his friends' memories.

Six years after Vir had left Oxford he was appointed Examiner in the Physical Section of the School of Natural Science. He examined in 1887, 1888, and 1889. In the two earlier years we were colleagues, for I was examining in the Zoological Section.

In November 1897 he was elected for one year to a Supernumerary Fellowship at Jesus College. These Fellowships were held in turn by the Principals of the Welsh Colleges, Vir's election being the first. In January 1898 I was also elected a Fellow of the same Society, so that, until November, when his tenure came to an end, we were again much together. Indeed, this year 1898, in the opportunities for constant and intimate intercourse, approached more nearly than any other the years of our early friendship. There were the frequent visits to Oxford for College meetings, which he attended very regularly, staying sometimes with the Principal and sometimes with us. In the Easter Vacation he and his

wife joined us at Lyndhurst for a few days' bicycling over the splendid roads of the New Forest. He then accompanied us to St. Helens Cottage in the Isle of Wight, riding along the fine road which follows the crest of the chalk downs from Newport to Brading. Then in September we again met for the British Association at Bristol, both staying with our old school-fellow, A. T. Martin, then a Master at Clifton College.

The meetings of the British Association were probably our chief opportunities for seeing each other, in some years perhaps the only opportunity. And of all these meetings two stand out especially associated with his memory, Cardiff, in 1891; Bristol, in 1898. At the former meeting Vir and his wife entertained a large party in Aberdare Hall. It reminded me of the old days when I was the only naturalist among Vir's Oxford friends; for at Cardiff the other scientific members of the party were all physicists—Sir Arthur Rücker, Sir Oliver Lodge, Professor C. V. Boys, and Vir himself.

I have spoken above and on p. 43 of the pleasure Vir found in bicycle-riding. The following pathetic story of over-strain—the outcome of irrepressible energy and buoyancy—is told by a friend:—

In 1900, after ten months of nursing, massage, and spécial dieting, with daily visits to and from the doctor's, he left the city and immediate suburbs of Geneva and went to a farmhouse at Colovrex, off the road to Ferney. From the orchard he could look across the lake to the summit of Mt. Blanc, and inland to a wide expanse of rich cornfields and vineyards. The doctor encouraged him to use the bicycle, but with considerable restrictions

and precautions. He took longer and longer rides without feeling any consciousness of strain. Gradually the idea of bicycling round the Lake of Geneva took possession of him, and one radiant day in August (I believe it must have been) he left the farmhouse after breakfast, saying he might be away for the day. No suggestion of the intense heat and glare or extravagant nature of such an expedition could weigh against the fascination of that idea, once conceived. He came back at dusk, very tired, and looking quite worn out, but very happy and grateful for the suggestion of bath and then supper in bed. A few hours later he suffered the intense pain, which, as he himself said, was the symptom of the serious mischief revealed nearly a year before in Cardiff.

As for the joy of the ride he did not speak of it much. He was face to face with its ill effects; but I am sure he had enjoyed part of it greatly, and felt himself to have been superlatively wise in having kept strictly to his diet of eggs and milk all day!

The exercise out of which Vir gained the greatest amount of pleasure and recreation was Alpine climbing, but his ever-growing self-sacrificing labours prevented it during the last decade of his life.

Mr. W. A. Wills has kindly drawn up a brief account of Vir's expeditions:—

Principal Viriamu Jones made his first visit to the Alps when still at Oxford. He and my brother, J. T. Wills, spent some time at the Eagle's Nest, in the valley of Sixt, and thence wandered on to Grindelwald via the Diablerets.

From 1883 onwards he spent several summer holidays in the Alps, generally climbing with his friend Wills, and in that first year they were caught in very bad weather near the summit of Mont Blanc and had some difficulty in getting down the mountain. In 1886 he

climbed in the Zermatt district. In 1887 he went to Mürren with Sir Seymour King, and they together climbed the Mönch and Jungfrau in one day—a very big expedition. In that same year he was elected a member of the Alpine Club. A few years later he made an interesting expedition in the wild mountainous region of the Pyrenees, of which the Maladetta is the centre, but he probably did no climbing after 1889.

He was a keen and enthusiastic climber, and to the end of his life retained his ardent love for the mountains in all their changing moods.

When Vir first re-visited Oxford he was struck with the calm and, as it seemed to him, barren repose of our academic life as compared with the activity and excitement of the world, and the inspiration of organizing and rendering efficient newer centres of education. Fresh from these labours, his thoughts about Oxford at this period are well expressed by her poet-son in the majestic well-known lines of 'Obermann'

The East bowed low before the blast
In patient deep disdain;
She let the legions thunder past,
And plunged in thought again.

Vir believed that, withdrawn from the world, we allowed all the energy and reality to hurry past without raising so much as a ripple on the intellectual surface; but he had considerable doubts about the depth and penetration of the thoughts for which so much of inspiration and of enterprise were neglected. It was one of the many subjects of dispute between us; but there came a time a few years later when his opinion of Oxford changed, and became the same as my own. A slight pause in the

rush of administrative duties enabled him to complete his first piece of research: 'life upon the heights' he well called it, following Matthew Arnold in 'Thyrsis'—

The mountain-tops where is the throne of Truth.

He then saw that the very qualities he had at first rather despised were among those which helped to make Oxford the ideal home of learning. He regretted with me that by a fleeting backward movement in the tide of academic life the home should have been left with children all too few, with many an echoing corridor, and many an empty chamber. But he had hope and faith in the future: he knew that the tide would turn, was even turning, that the ideal home of learning was still here, solidly founded on the tradition of centuries of research; and he longed for a time when he might return to his old University and devote his life to original work and to teaching the subjects of his investigation. We often talked over these hopes and plans for a future time, when he should have finally left to others the insistent claims of administration and all the strain involved in guiding the destinies of a young, rapidly-growing, flourishing, many-sided centre of educational life.

If the dream could have come true, what strength would have been brought to those who would follow the great traditions of Oxford,—where we are indeed happily moving, but slowly, slowly, back to the ancient ideal of a University existing, before all things and above all things, for the love of knowledge and for the transformation effected in the mind of man when he bears his part in the advancement of learning.

‘This is really a most elegant club!’ said Vir to our host, as we were dining with an old Balliol friend at the College fitted more than any other in the world for the realization of this high academic ideal—All Souls, that delightful week-end resort for professional men in London.

His brother Leif writes to me, October 9, 1910:—

It is curious that the founding of the Welsh University and the building up of University College, Cardiff, should be the outstanding memorials of Vir’s practical achievement. For his was the most penetrating intellect I have ever come across, and it is in the realm of scientific research, or of pure thought, that his greatest work might have been expected. Had he lived longer, I think he might have given himself up wholly to physics; he was ever happiest in his laboratory.

I have never had a friend who saw so clearly right to the heart of the researches on which I have been engaged. He appreciated at once the inspiration and the opportunity which are freely offered to every young worker, in the life and the teachings of Darwin. Many naturalist friends have failed to see, but he instantly realized, that the aim of work upon some insignificant form need not end in the organism itself but may be directed towards the criticism or the confirmation of some vast far-reaching principle or process, such as heredity or natural selection; and may thus throw clear light upon the whole history of organic evolution. ‘I’ll tell you what, you are going to make those caterpillars of yours important,’ he would encourage me by saying, as he instantly seized the drift of an investigation.

Of the important research upon which he was elected a Fellow of the Royal Society others can speak with authority, but I may quote the words used by an eminent Physicist, when Vir's election as a Fellow of the Royal Society was being discussed: 'He chose a piece of work which Rayleigh might have chosen, and he did it as well as Rayleigh could have done it.'

Vir's name first came before the Council in 1891. His work was described in the following paragraph¹:—

B.Sc. (Lond.). Principal and Professor of Physics in the University College of South Wales and Monmouthshire. Fellow of University College, London. Distinguished for his acquaintance with physics. Engaged in the teaching of physics as well as in the organization of scientific studies, and is anxious to promote the progress of science. Author of a memoir 'On the Determination of the Specific Resistance of Mercury in Absolute Measure' (Phil. Trans., vol. clxxxi, 1890). Author also of the following papers:—'On the Calculation of the Co-efficient of Mutual Induction of a Circle and a Coaxial Helix' (Proc. Phys. Soc., vol. x); 'On the Use of Lissajous' Figures to determine a Rate of Rotation, and of a Morse Receiver to Measure the Period[ic] Time of a Reed or Tuning-fork' (*ibid.*); 'Suggestions towards a Determination of the Ohm.' Read before the British Association at Leeds, 1890 ('The Electrician,' vol. xxv).

Two years later, in 1893, it was generally known in the Society that his work had been spoken of very highly in the Council, and that he was tolerably sure to be selected the following year. When the names of

¹ Published, after his nomination by the Council, in *Nature*, vol. 1, Nov. 17, 1894, pp. 55, 56.

the fifteen selected candidates were published in 1893, some of the Fellows disagreed with the action of the Council, and determined to let it be known that they intended to modify the list. Under the erroneous impression that it was necessary to propose other names in lieu of those which were opposed, these Fellows in the first proof of a circular-letter to be sent to the Fellows of the Society, stated that they had 'chosen the name of Professor J. Viriamu Jones, Principal of the University College of South Wales, Cardiff'. 'We understand,' the letter continued, 'that in the opinion of physicists Professor Viriamu Jones is eminently qualified for the Fellowship of the Society by his discoveries and original contributions to physical science.' Before the final letter was posted the error was discovered, and, as no alternative proposal was required by the constitution of the Society, no such proposal was made. Nevertheless, one of the earlier forms had appeared in the *Times*, and as Vir's name had been thus publicly mentioned in what was really an attack on the Council, he was not unnaturally alarmed at the possible effect upon the prospect of his election in the following year. But, while he keenly appreciated the recognition of his researches by his scientific colleagues, Vir's real incentive was love of the work itself, and he would never have set more than a due and reasonable value on such honours. I know, too, that his wish was less on his own behalf than on that of the University College of South Wales, which would be benefited by the distinction conferred on the Principal. He was also greatly distressed lest it might

be inferred from the use of his name that he was in any way associated with the attack. It was clear, however, from the wording of the letter, that the use of any name was a mere formality, in order to satisfy a possible, and as it turned out a mistaken, interpretation of the statutes.

With a somewhat longer experience of the scientific men in this country, I felt confident that no prejudice would be introduced into the discussion of his claims, or deflect the Council from the firmest adherence to the principles of justice and fair play. The times of fierce personal animosities and jealousies between scientific men in this country have been left a generation behind; and although struggles, keenly fought and severe, still arise and must always arise in our ranks, they are almost invariably confined to the subject-matter or the policy of science, and such encounters leave no bitterness behind. And Vir was soon satisfied on this subject himself; for he wrote to the President, Lord Kelvin, explaining that he was unaware of the use which had been made of his name. I received the following letter from him on June 6th. I have some hesitation in making the postscript public, but decide to print it as a further example of Vir's generous sympathy in the troubles and anxieties which were confided to him :—

42 Park Place, Cardiff.

MY DEAR EDWARD,

I have received the letter of which the enclosed is a copy from Lord Kelvin. It seems as if you read the position aright, and that things remain straight.

Affectionately yours,

J. VIRIAMU JONES.

June 5, 1893.

P.S.—I am vexed to hear of the doubt about the Hope Professorship. It will be too bad to bring even a brilliant man from America, when his match as a son of the University is among the candidates. I hope you are exaggerating the impression he has made.

6 Cadogan Place.

DEAR PROFESSOR JONES,

I was glad to receive your letter yesterday, and I should have read it at the meeting for the election of Fellows if there had been discussion or if questions had been put regarding the correspondence in the *Times*. Nothing however occurred which called for my reading it, but I showed it to several friends and I am sure that they and all others perfectly understand your position in the matter.

Personally I may say that I hope the time is not far distant when you will be one of our Fellows, and I believe the same feeling exists among the Council very generally. I am glad to know that you will be pleased with the result of yesterday's meeting.

Believe me,

Yours very truly,

KELVIN.

Vir was nominated by the Council in the following year, and was formally elected on June 7, 1894. A year or two later he told me that he had recently come across a copy of the first form of the circular-letter, and had felt much pleasure in reading it again. 'It was really a magnificent testimonial,' he said, with a smile.

There is little more that I can say of the last twenty years of Vir's life. The story of the comradeship and unflinching comfort and help of his happy married life, and the history of his great work at Cardiff, should only be

told by those who were in constant association with him and with men who laboured beside him. May it be accomplished soon, while the memory of his inspiring personality is fresh and strong, and may it preserve that memory for future generations so that they will know the man himself as they will surely know and honour the work which he did for Wales.¹

Sir Isambard Owen has kindly written the story, which he knows better than any other man, of the historic part played by Vir in the foundation of the University of Wales. I had hoped to include it in the present or an additional chapter ; but neither could the printers be delayed nor could such a labour of love be unduly hurried. It therefore appears in Appendix III, p. 302.

The following brief summary of Vir's beneficent labour on behalf of his native land has been kindly drawn up by Sir David Brynmor-Jones :—

Apart from his achievements in scientific research and his teaching work as Professor of Physics the remaining eighteen years of his life were devoted to inspiring, promoting, and guiding the movement for a better and more extensive provision for higher and secondary public education in Wales, and to the organization and administrative operations of the new institutions which the joint efforts of himself and many other leaders of opinion and civic action have brought into being there since 1880. It is not possible in a short paragraph to give an adequate description of his multifarious activity or of his skill as an organizer and man of affairs. I can only mention the things which live in my memory and strike

¹ See Chapter XI on 'The Educational Movement' in *The Welsh People*, by Sir John Rhŷs and Sir David Brynmor-Jones, 5th ed., 1906.

me as most worthy of remark. From 1883 to 1892 he was mainly occupied with the starting of the work of the new College at Cardiff and guiding its course during its critical early years. The establishment of a system of University Extension Lectures in Glamorganshire and Monmouthshire, and of the Aberdare Hall for women students, as well as the reorganization of the Medical School at Cardiff in close connexion with the College, were very largely due to his initiation and co-operation. After the creation of County Councils in 1888 and the passing of the Technical Instruction Act 1889 giving special rating powers to these bodies, he devised and carried into effect a scheme for a joint arrangement as to technical and engineering instruction between his College and the County Councils of Cardiff, Newport, Glamorganshire, and Monmouthshire. In regard to secondary education he was foremost among those who successfully laboured to induce the Welsh County Councils to put into operation the Intermediate Education (Wales) Act 1889, which through the excellent management of Mr. (now Lord) Rendel and other Welsh members and with the acquiescence of the then Conservative Government had become law, and he in other ways helped the gradual establishment of the County Secondary Schools which now exist in every county in Wales. It became necessary to provide some central authority in Wales to co-ordinate and in some respects to control the teaching in these new and widely scattered schools, and the Central Welsh Board for Intermediate Education was constituted in 1896. Vir in due course became its Vice-Chairman and acted in that capacity until his death.

More noticeable and more arduous still was the part he played in the creation of the University of Wales. He was not the pioneer of the agitation that led to its formation; but even before he became Principal at Cardiff he had laid hold of the conception of a well-arranged, complete, self-contained national system of

public education for Wales. The idea of a national University which possessed Sir Hugh Owen and the men who worked with him had been for a short time lost sight of, though it had been partially realized by the founding first of a University College at Aberystwyth in 1872 and afterwards of two new colleges at Bangor and Cardiff respectively in 1883-4. The idea itself was revived at an opportune moment by Vir in an address delivered to the Cymmrodorion section of the National Eisteddfod in London in August 1887, in which he urged the formation of a degree-granting teaching University as the coping-stone of the Welsh educational edifice—a University which would order ‘the scattered and disconnected results of previous action as a magnet arranges the iron filings within its field of force’. In all the steps that resulted in the realization of this aim by the granting of the University Charter in 1893 and the constitution of the University my brother was zealously and usefully concerned, and it was in a large measure due to his tact and persuasive advocacy that difficulties were overcome and a sound and business-like scheme evolved. It may be said truly (seeing that he was soon afterwards laid aside from work) that the crowning event of his brief career was his presentation, in the discharge of his duty as Vice-Chancellor at the first ‘congregation’ (so the assembly was called) of the new University of Wales at Aberystwyth on June 26, 1896, in the presence of thousands of spectators from all parts of the Principality, of the then Princess of Wales and the late W. E. Gladstone as the first recipients of degrees *honoris causâ* to our late King, then Prince of Wales, immediately after his installation as Chancellor. It would not be becoming for me—a brother—to use language of panegyric, but perhaps I may without impropriety conclude this note by quoting the words of a colleague who knew him well and has a right to speak:—

‘for educational statesmanship and wise diplomacy, for self-sacrificing and persistent efforts in the establishment

of great institutions, for loyal and ungrudging service in the realization of high ideals no Welshman stands higher than Principal Viriamu Jones.'¹

I cannot forbear to allude to the last great service he was able to render. The course of his fatal illness, well-nigh two years in duration, was interrupted by a deceptive pause and partial recovery, so that in the autumn of 1900 he returned to his post and presided over the College for that term. Many will remember the skilful and persuasive appeal—a masterpiece of eloquence, as Sir Harry Reichel has described it—by which he induced the Cardiff Corporation to grant a site of five acres at Cathays Park to the College. By the kindness of Mrs. Home I am able to print Vir's own account of the event and of the pleasure it gave him. He wrote, on December 21, 1900, to his sister:—

It is the last day of term, and to-morrow we start for Surrey. I am the better not the worse for my term's work, and am very glad that after my long inutility I have been useful to the College this term, if never before. For I have managed to change the opinion of the Corporation and induced them to give a site of five acres to the College for its new buildings instead of selling it as they intended at my return to do. I am very proud of them for being willing to change their minds at the bidding of reason.

The depths of pathos are sounded by Vir's simple

¹ The Rev. D. Tyssil Evans, M.A., B.Sc., Lecturer in Semitic Languages at the University College of South Wales and Monmouthshire in an article on 'John Viriamu Jones' in *Welsh Political and Educational Leaders in the Victorian Era*, edited by the Rev. J. Vyrnwy Morgan, D.D. (London, James Nisbet & Co., Ltd., 1908).

words with all that they imply of hope destined to be unfulfilled.

The statue of the first Principal stands in the College he guided to a great and noble work. The words of its inscription, the utterance of all his friends, are a fitting conclusion to this brief history of a great man who died in the morning of life :—

THIS STATUE WAS ERECTED BY HIS FRIENDS
IN MEMORY OF HIS WISE, UNWEARIED SPIRIT,
AND OF A LIFE DEVOTED TO THE SERVICE
OF HIS COUNTRY.

CHAPTER VI

MEMORIES OF THE UNION IN THE SEVENTIES

THE use of the historic present in the following chapter may perhaps be justified on the ground that it was actually written in the seventies—in the latter part of the year 1879. Data obtained from the Minute-books of the Society have been added in footnotes, and a few memories revived in the course of this study have been introduced into the text.

It is believed that the following account is an accurate record of procedure, and that it preserves many interesting or amusing incidents of the last few years of debate in the Old Hall—the present Library. The announcement that the New Hall was ready for use is to be found in the Minute-book under the date, August 1, 1879. It is therefore evident that the last Debates in the Old Hall were held in the Summer Term of 1879, when F. R. Burrows was President, the first in the New Hall, Michaelmas Term 1879, under the presidency of E. T. Cook.

The manuscript was read and approved in 1879 by my dear friend J. Viriamu Jones, but his personal experience of the Union was of course confined to the period which opened in January 1876.

The meetings for Debate at the Union begin at 8.30 p.m. in the Summer Term, at 7.30 in the Michaelmas and Lent Terms, this latter hour being fixed to suit the six o'clock dinner of nearly all the Colleges. At Christ

Church, however, 'Hall' is at the fashionable hour of seven, and it is impossible to do justice to the meal and be at the Union in time for the meeting. Members will recall the time when Christ Church men continually raised the subject in private business, hoping, but in vain, to alter the hour to eight.¹ The annoyance is not, however, so great as might be expected from the number of men at that College, for many 'House' men profess to despise the Union, as they do rowing. There is a story of a Christ Church man, who, asked why he had cut a friend belonging to another College, replied—'Daresay I did. You must have been in boating clothes.'²

It follows from this later dinner hour that at least one part of the audience at the Union is not too noisy or critical. Men who listen to speaking directly after a heavy dinner are apt to share the quality of the meal. Especially is this true if they have dined with the appetites of young Englishmen who have spent the afternoon in exercise. There is an expression of sublime content on their faces as they take their seats on the very comfortable benches of the Debating Hall. They will listen calmly, and perhaps applaud in a dignified and unimpassioned manner at convenient pauses—assuredly not an audience to cheer a speaker with the eloquence of their looks, but a most excellent one for

¹ e. g. December 3, 1878.

² The fine performance of Christ Church on the river for many years gives a curious interest to memories of the spirit displayed in the seventies by a set which gave itself airs of great and indeed crushing superiority.

How well one remembers the tandem nicely timed to reach Oxford so that the driver might parade an aggressive indifference before the hurrying crowds on their way to the river.

a beginner to practise upon. A young speaker once told me how nervous he felt when called on to address his first audience:—a meeting of working men. All his difficulties, however, vanished when he began. The men listened—perfectly stolid and self-contained—to anything he liked to say, and for as long as he liked to say anything. They had just finished a free dinner and had eaten,—

as only people can
When *other* people pay.

We enter the block of buildings by the main entrance approached from the 'Corn' by the narrow Union Passage. There is a restless crowd in the Vestibule. Many are reading the latest telegrams, many talking in groups and many doing nothing, but all display an unobtrusive interest in any attractive member of the broken stream of fair visitors.

The ladies, with their friends, and those members who wish to read books in the intervals or during dry speeches, go upstairs, through the small Fiction and Poetry Library, to the Strangers' Gallery. Here hats may be worn, but the great privilege of making audible signs of approval or disapproval is lost. All clapping, shouting, or stamping is entirely out of order, for the Gallery is not part of the House.

The glazed frame in the Vestibule, usually holding the written notice of the subject for Debate, is now empty. The paper has been taken to the room at the top of the buildings where the Committee meet, every Thursday evening, before Debate, to consider the affairs of the society in general, and the subject for

next week's Debate in particular. There, 'like Gods together, careless of mankind,' they are sitting now. We will not intrude upon the seclusion of that little Government, for is not that book in which the Secretary is now writing the names of the officers present 'The *Private* Minutes of the Standing Committee of the Oxford Union Society'? The book is well named, not only because it is provided with a lock and key, but because the sight of a single page would be quite enough for the most prying and inquisitive of meddlers.

The Hall, except during the Thursday evening meetings, is used for newspaper reading, and a few minutes before the President's entrance, when the room is already fairly full, a servant walks round and collects the papers from the members. The semi-circular seat against the wall round the platform, supposed to be occupied by prominent speakers, ex-officers and senior members, is used by a number of men whose chief title to their pride of place is assurance. The velvet-cushioned chair, raised on a dais in the centre of the semicircle, is for the President, while the Librarian and Treasurer sit on his right and left, and the other members of the Standing Committee beside them. The speakers usually stand by the table in the centre of the platform, where the Secretary sits and takes the minutes.

The Library Clerk brings in the notices to be read at the meeting. The Standing Committee descend from the Committee Room in a sort of irregular single file, the President leading, followed by any Ex-Presidents who may be serving on the Committee, and then by the

Librarian, Treasurer, members of the Standing Committee, and Secretary.

Increasing shouts of 'Order!' and the general removal of hats announce that the President has entered the Hall. He alone is in evening dress, and if a Scholar, or a Graduate, wears his gown. If a Commoner, he does not take from the dignity of the occasion by putting on that apology for a gown with its rudimentary sleeves in the shape of flying ribbons.

The densely packed crowd of men between the door and the central stove make way for the procession, the President ascends the dais and proclaims 'Order! Order!'. He then opens the proceedings by reading the list of candidates whose names, with those of their proposers and seconders, have remained exposed in the Writing Room for the regular time. Before the list he repeats the formula:—'The following gentlemen have been duly proposed and seconded for the Membership of this Society,' and at the close he says: 'No ballot having been demanded these are declared elected Members of this Society.' If he is nervous the formulae are sometimes distorted. Thus a President has been known to begin his first meeting¹ with—'The following *members* have been elected *members*', to the intense joy of the House and his own confusion.

The President then announces:—'The Librarian will now bring forward his list of books.' The list is read, and the House, with no false modesty, freely expresses its opinion on the various books and their prices. Every proposed addition to the Library must be first submitted

¹ May 17, 1877.

to the House, and its price stated, before it can be purchased. Something like £10 is thus spent on books every week. The list is drawn up by the Librarian and his special Library Committee which meets every week for this purpose.

The President¹ now asks :—‘ Does any Hon. Member object to any of the books on this list ? ’ A dark man at once starts up and states that he opposes *Under Two Flags*, by Ouida. ‘ Does any Hon. Member object to any other book on the list ? ’ asks the President, and there being no response, declares :—‘ The rest of the list is carried. The Hon. Member will now bring forward his objection to *Under Two Flags*, by Ouida.’ The dark man then rises and says that he remembers seeing in an old Geography a division of China into ‘ China Proper ’ and ‘ China Improper ’ ; ‘ and I think ’, he goes on :—

that the books of the authoress under consideration might be similarly classified into ‘ Ouida Proper ’ and ‘ Ouida Improper ’. It is because the book before us to-night belongs to the latter class and is most decidedly improper, that I beg to oppose its introduction into our Library.

Laughter and cheers mingled with hoots follow this statement. There will be very little apathy now on the part of the House, with the prospect of some fun in Private Business. The dark Member points out how really valuable books are not in the Library, and that they ought to be considered before the money of the Society is wasted on ‘ tawdry trash ’. Here some signs of dissatisfaction are evident and the speaker sits down.

¹ Feb. 18, 1875. A. Sloman, Scholar (1870), Pembroke.

The Librarian¹ shortly defends the book, saying that the majority of his Committee were in favour of it after a long and thorough discussion. However, he wishes to hear the expression of the House's opinion on the subject, and is therefore glad that the Hon. Member has opposed the book.

The Librarian is immediately succeeded by a fluent speaker² who says he has a right to speak on this subject, as *Under Two Flags* is the only one of Ouida's books that he has *not* read. He expresses his admiration for Ouida generally, and then asks :—

And why should the Hon. Member be so very careful of our morals? Why should he come down here—a self-elected *censor morum* —to decide what is 'proper', what 'improper' for us? Let me remind him that we are *not* a Young Men's Christian Association, and that the members of this Society feel themselves quite able to take care of their own morals without the assistance or advice of the Hon. Member.

The House is always pleased to hear its own dignity asserted, and shows its approval by loud cheers.

Various speeches on both sides of the question are heard with obvious impatience, and then a man³ comes

¹ E. C. Thomas, Scholar (1870), Trinity : Librarian 1874-5.

² R. H. Hadden, Merton (1873) : President 1876. Vicar of St. Botolph, Aldgate, and later of St. Mark, North Audley Street : Member of the London School Board. Died 1909.

³ W. Shirley Shirley, Balliol (1871). M.P. for the Doncaster Division. Died 1888. My friend Dr. F. A. Dixey, F.R.S., writes :— 'It was commonly said that Shirley owed some of his oratorical method to the fact that he had taken lessons in elocution from a clergyman named D'Orsay, who advertised largely at that time.' Mr. M. H. Gould also remembers the rumour that Shirley took lessons in elocution.

forward who is at once recognized. He is greeted with shouts of laughter and cheers ; for the House knows well that it is going to be amused by his excited manner. He speaks, even on the most ordinary subjects, with terrific emphasis, and will give utterance to the loftiest sentiment or the veriest commonplace with the most impassioned action. He now commences—pausing after every word to give it full force, and speaking as if his very existence depended on convincing the House :—‘ Sir ’—a life-time of agonized effort is concentrated in the word—

it seems to me that the Hon. Members who have opposed this book are like those clocks which will go on striking, not because they have anything to say, but because there is something the matter with their insides.

This rendering of Mrs. Poyser, delivered in the speaker’s characteristic manner, produces a most ludicrous effect, and the House thoroughly appreciates it. After a short defence of the book he sits down.

The dark Member leading the opposition at once jumps up and replies :—

Sir! The Hon. Member also reminds me of a clock, and one of that particular kind known as cuckoo-clocks, which attract notice more by the energy with which they deliver their remarks than by anything particular contained in those remarks.

The readiness with which the demonstrative man has been scored off pleases the House, which always delights in any little personality. But now the dark man has briefly summed up his own and other arguments, and the President asks :—‘ Does any other Hon. Member

wish to address the House on this subject?' Any one wishing to avail himself of this offer is discouraged by the general, impatient, cry of 'Divide', 'Divide', throughout the House. Meeting with no response, the President says:—'The Motion before the House is that *Under Two Flags*, by Ouida, be purchased by this Society. Those who are in favour of this Motion will say "Ay"'. After a somewhat deafening shout, he says:—'Those who are against the Motion will say "No"', and there is a rather louder shout. He then says:—'The 'Noes' have it: does any Hon. Member press for a division?' The demonstrative man is not satisfied with this uncertain test of numbers, and demands a division. 'Those who are in favour of the Motion will go to the right of the Chair: those who are against it will go to the left,' says the President. He appoints tellers, and the numbers are counted and brought to him. Men on comfortable and well-placed seats are sometimes unable to summon up enough interest in the division to risk losing them; while men on bad seats often seize the opportunity of getting better ones, but the great majority are really interested in the vote. The President now reads out:—'The numbers are: for the Motion 120, against it 105. The Motion is therefore carried.' The result is received with loud applause by the majority. No less than fifteen¹ members have spoken in the debate on this single book, seven, including an Ex-President² who spoke twice, being against it, and eight in favour, including one Ex-

¹ The Minute-book accidentally omits the name of W. S. Shirley.

² M. H. Gould, Tylney Exhibitioner (1870), Trinity: Treasurer 1873; President 1874.

President¹ and two future Presidents.² Yet so quickly will the feeling on this question subside that in three years a Librarian³ will without any opposition complete the series of Ouida's books in the Library and order others, including *Under Two Flags*, for the Smoking Room.

Sometimes the name of the book that has been under discussion suggests a little joke which the President⁴ is unable to resist.

'The question before the House is *Why Paul Ferroll Killed his Wife*' is put from the Chair, and a Member⁵ at once rises to inquire how the House can possibly answer that question without reading the book.

As soon as the Librarian's list is done with, the President reads out any official notices and then proceeds to make the usual inquiry:—

Has any Hon. Member any question to ask of the Officers of this Society relative to their official duties?

It is now the Treasurer's turn to be badgered. He is the sole manager of the rooms of the Society, and will

¹ H. H. Asquith, Scholar (1870), Balliol; Treasurer 1872-3; President 1874. Prime Minister since 1908.

² H. W. Paul, Scholar (1871), Corpus Christi; President 1875; (M.P. for Northampton 1906-10); and R. H. Hadden.

³ E. B. Poulton: November 22 and 29, December 6, 1877; June 6, 1878.

⁴ March 4, 1875. A. Sloman. The book was lost by 120 to 85, although *Paul Ferroll* was accepted without opposition. On the same evening Rhoda Broughton's *Nancy* was lost, but her *Goodbye Sweetheart* accepted, both without a division. Ouida's *Tricotrin* was lost by 107 to 92. The opposition was in every case led by F. S. Pulling, Exhibitioner (1872), Exeter. Professor of History in the Yorkshire College, Leeds, 1877. Died 1893.

⁵ F. R. Burrows, Trinity (1875): Treasurer 1878-9; President 1879.

be called to account for any little inconvenience suffered by Members. Two or three men at once start up in different parts of the House to remind him of something wrong. The President indicates the Member who has caught his eye—a nervous man who, in a hurried and confused manner, asks why the water-bottle and glass have not been placed on the Secretary's table, as usual. The Treasurer comes forward, and, speaking very deliberately, as if to give due weight to the importance of the subject, says:—'The water-bottle and glass are not on the Secretary's table because—the servant has not yet brought them in.'

The next man complains of the quality of the cigars in the Smoking Room, and asks if the Treasurer can do anything to remedy the evil. The Treasurer at once replies that from all he has heard of them, those at the highest prices are very good, and those at the lowest are at any rate cheap. The Hon. Member is not satisfied, and says he is very sorry to disagree with the opinion of the friends of the Treasurer. He thinks it somewhat significant that the Treasurer relies on his friends' judgement, and begs to ask if he has ever made the experiment himself. The Treasurer thinks that this question is hardly relative to his official duties and more concerns his private tastes; but if it is any satisfaction to the Hon. Member he is pleased to inform him that he often smokes cigars in the Smoking Room and derives great pleasure from so doing.

Another Member now gets up and asks if *The Rock* may be provided with a reading-cover like those in which many other much-read papers are kept. The

Treasurer will take it into his serious consideration. At once a man asks if the Treasurer will also take into his consideration the supply of reading-covers for *the other comic papers*. Here, however, some one's feelings are injured, and the President is appealed to on a point of Order. He gives as his dictum :—

After a long and often-repeated experience, I think I may say that it is not customary to rule that joke out of Order.¹

The next question is asked by a man who speaks from the midst of the standing crowd by the stove, or rather double fire-place, in the centre of the Hall.² The House now expects some fun ; for this Member with the high colour and loud voice is known to be a most persistent questioner of the Treasurer, and upon him will descend the most crushing of official answers :—

I wish to ask the Hon. Treasurer if he can, or rather will, do anything to secure more ready attention to the demands of Hon. Members for refreshments in the Coffee and Smoking Rooms. The last time I wanted a cup of coffee I was kept waiting, and discovered that the delay was due to a prolonged flirtation between the waiter and the servant in the service-room. Had I not been anxious for my cup of coffee I might have been interested ; as it was I was annoyed.

¹ An article in *Vanity Fair* (Feb. 20, 1875, p. 105) leads to the inference that the date was Jan. 28, 1875, the last questioner, M. H. Gould, and the President, A. Sloman. I had never seen the article until Oct. 20, 1910, but it served to recall the past and I have no doubt that the inference is correct.

² The date was probably May 31, 1878, when F. R. Burrows was Treasurer, and the Minute-book records that 'an Hon. Member asked a question about coffee'.

The Hon. Member ceases amid approving shouts, and the House wonders how the Treasurer¹ can score in his reply. That Officer comes forward in a slow and hesitating manner, and answers in a deep, pained voice, as though grieved that the Hon. Member should have so just a cause for complaint:—

I will make it my serious duty to expostulate with the waiter, and thus prevent any recurrence of this annoyance about the coffee, but above all to prevent any occasion for jealousy on the part of the Hon. Member.

These last words are said very slowly and impressively, as if the speaker had the welfare and happiness of the Hon. Member nearest to his heart.

I wonder if the Treasurer, in thus crushing a questioner, remembers those days of the not very distant past when he was a freshman, and regularly every Thursday bothered the then-reigning Treasurer² 'about that pane of glass', dramatically pointing to a breakage at the top of the Debating Hall. Does he remember how, after his question had been asked several Thursdays³ without effect, that Officer told him—his face beaming with benevolence towards his questioner—that he should leave the pane as it was as an encouragement to youthful orators? It is wonderful what a difference two or three years make at this time of life. How

¹ F. R. Burrows.

² Alfred Milner, Scholar (1873), Balliol; Treasurer 1875-6; President 1876. Viscount Milner.

³ One of the nights was probably Nov. 18, 1875, for it is recorded that, on this date, F. R. Burrows asked a question of the Treasurer.

slowly existence moves between 29 and 32 as compared with its headlong rush from 19 to 22.

Suddenly proceedings are checked by a tremendous, widespread cry of 'Order'. A bashful young freshman has unwittingly rendered himself conspicuous by entering the Debating Hall with his cap on. He cannot now make out why every one is shouting and looking in his direction, till in the midst of the President's statement, which he does not dream of applying to himself, 'I must remind the Hon. Member that it is not considered customary to wear hats in the House during the meetings for Debate,' he suddenly takes in the situation, aided perhaps by a friendly hint, and hastily removing his cap, plunges wildly into the midst of the crowd, blushing crimson, and trying vainly to look unconcerned.

A man rises, as soon as silence is restored, and asks the Treasurer to reconsider the district within which Oxford notes are distributed. He argues that the side of the city where members of the University chiefly reside has lately grown far beyond the point to which notes are delivered in that direction, while at the same time they are carried unnecessarily far on the other side, which not very aristocratic neighbourhood is selected by but few men for their rooms. Here he is interrupted by a plaintive voice from the very end of the Hall, 'Oh! Sir! I live there!'

A Member then begins to offer the suggestion that better and stronger boxes should be provided for the chessmen in the Smoking and Coffee Rooms. He is promptly checked by the President:—'The Hon. Member

is totally out of order in not putting his remarks in the form of a question.'

Questions now come more slowly,¹ and soon the President repeats his invitation without receiving an answer. He then says:—'The House will now proceed to Public Business,' and reads the subject before the House with the Mover's name. The latter comes forward and the regular Debate begins.

At the reading of the Motion a good many Members retire to other parts of the building to write letters or read the papers. They only came in to be amused by the Private Business, and their noisy exit is rather disturbing to the Mover; but the great majority stay, especially if the Debate is exciting or the Mover popular.

What is the subject to-night? Is it 'Disestablishment', regularly brought forward once a year, and generally on the Thursday night in the Eights' Week when Oxford is full of visitors and the gallery crowded? If so, a cause that is never popular may be rendered even more unpopular than usual. It may be introduced by a hard-voiced Mover whose caustic sentences are delivered in the most biting manner. He discusses whether the Church of England is coextensive with the Nation, and continues:—

But there is one way in which the Church of England is truly National—*we all pay for it*. At all times and everywhere, in sickness and in health, from the cradle

¹ The length of Private Business varied immensely, the number of questions depending on the amount of fun that could be extracted from the official replies or failure to reply.

to the grave, gentle Mother Church follows us about for a fee. It reminds me of a description of the miserly old widow in the Scotch song:—

It's pay me here, and pay me there,
And pay me, pay me, ever mair,
The de'il himself would hardly care
To pay her her annuity.

Here a facetious Member, alluding to the Scotch pronunciation, calls out 'Now translate it, Sir!' This, however, is a very mild remark, for the Mover is generally interrupted with '*Do sit down, Sir!*', '*Oh! Oh!*', and incessant stamping and yelling. When finally he compares the behaviour of the Church towards Dean Stanley to that of 'an underbred cur', the sound of hissing becomes general, and speaking is temporarily stopped. The President¹ now sees that he must interfere:—

I must remind the House that the sound of hissing is entirely out of Order, and I must call upon all decently disposed members of the House to assist me in maintaining Order.

Silence is restored, for the House is wonderfully obedient to the ruling of the Chair. The Mover continues and speaks with equal bitterness of the Clergy and the burial of unbaptized infants. His remarks on this subject are referred to by our demonstrative friend of Private Business,² in a speech opposing the Motion.

¹ May 7, 1875. T. Raleigh, Exhibitioner (1871), Balliol; Treasurer 1874-5; President 1875. Hon. Sir Thomas Raleigh, K.C.S.I. H. H. Asquith moved the adjournment of the Debate and supported the Motion on May 13. H. W. Paul opposed and, chaffing Asquith on the source of his arguments, charged him with knowing the whole of Macaulay.

² W. Shirley Shirley.

With terrific scorn he asks :—‘What do I care for the Hon. Member and his unbaptized infants?’ This sentiment thoroughly pleases the House, and the applause and laughter are long and loud.

At another time Disestablishment may be introduced by a Mover¹ who treats the subject from the more sympathetic ground of advantage to the Church herself, who indeed upholds Disestablishment, but judiciously avoids mention of Disendowment. He is one who believes in, and predicts, a brotherhood between the Christian sects, who quietly and unassumingly pleads the cause of the religious bodies *extra Ecclesiam Anglicanam*, and tries to show that an Establishment exercises a baleful influence upon them; but the mere fact of his standing up as champion of the unpopular cause is enough, and for some minutes he is not allowed to utter a word. When at length the shouting subsides, he begins:—

Sir, it is recorded of the inhabitants of an ancient city that when they knew not what to do for lack of argument—they cried for the space of three hours, saying, ‘Great is Diana of the Ephesians.’

The House admits the score, and he is allowed to proceed in peace.

Or is the subject Mr. Gladstone’s retirement from the leadership of the Liberal party, when the energetic Member² moves, in all his characteristic style :—

That the Liberal party, if led by a moderate man

¹ June 1, 1876. R. F. Horton, Scholar (1874), New College (President 1877); Alfred Milner, President, in the Chair.

² W. Shirley Shirley. This debate and its adjournment, treated as a single occasion, form the subject of an article in *Vanity Fair*

like Mr. Forster, so far from being shattered by Mr. Gladstone's retirement, is entitled to the warmest confidence of the country.¹

At the close of the Mover's speech, an Ex-President² comes slowly forward, receiving loud applause, especially from Conservative Members. He is well known for his power of debate, and, when he chooses to employ it, his use of bitter invective. With his thumbs ever engaged in the task of lifting his B.A. gown a little

for Feb. 20, 1875, p. 105 (Oxford Sketches, No. 1—Rising Politicians). Shirley is described as follows:—

'The mover advances to the table, takes out his notes, pours out a glass of water and begins. Before the end of his first six sentences you can pronounce a judgment on his speech in one word: Bunkum; but clever bunkum for all that. Swaying his body as he speaks, as if he were trying to pitch a word into each in turn of the bookcases that run round the room, he pours forth a glowing description of the glories of Liberalism.'

For Dr. F. A. Dixey's amusing recollections of the effects of this paragraph upon Private Business on Feb. 25, 1875, see Appendix IV, p. 313.

¹ Jan. 28, 1875. A. Sloman, President, in the Chair. The debate was adjourned to Feb. 4, when the following amendment was moved by H. H. Asquith, Ex-President:—'That this House, while it deplores the irreparable loss sustained by the Liberal Party, and the country, in the retirement of Mr. Gladstone, believes its present reverse to be only temporary and retains unshaken confidence in Liberal principles.'

The present Prime Minister's speech on Feb. 4, 1875, is thus described in *Vanity Fair*:—

'Now for a treat, and the only pretence to eloquence that you will hear to-night. Listen to this speaker. You will hear ready-made doctrines turned out at the rate of five per minute, with a confidence begotten of a newly-won fellowship [at Balliol]. You would like, wouldn't you, to have a private interview with this man, and write down on a sheet of note paper, from his dictation, a solution of all the vexed questions of the day.'

² M. H. Gould.

higher on his shoulders, he begins with the utmost deliberation :—

Sir, the Hon. Mover in one respect greatly resembles the Liberal party—he has lost his head ; and I think it is very doubtful whether the Liberal party or the Hon. Member would be benefited if they regained their heads.¹

At the end of his speech he makes epigrammatic reference to all the various Liberals who had been mentioned as possible leaders.

The Marquis of Hartington will do well as the leader of the Liberal tandem : he is strong, well-bred, and will obey the touch of the whip. But who is to drive ? Shall it be Mr. Bright ? The shafts will be broken against the walls of the Establishment. Shall it be Mr. Goschen ? The passengers will all fall out by the way. Shall it be Mr. Robert Lowe ? The passengers will consist of one person and that will be Mr. Robert Lowe.

No ! the Liberal party lies, a headless trunk, by the shores of the political sea :—

*Avulsumque humeris caput, et sine nomine corpus.*²

¹ *Vanity Fair*, which in other respects does scant justice to the speech, gives to Gould's opening words another and, as I think, an incorrect form. It must not be forgotten that the Mover's action was so terrific that there really seemed to be danger of his losing both head and limbs. But the Ex-President has been known to make use of a similar opening on other occasions. Thus, on April 22, 1875, T. Raleigh, President, in the Chair, he began, in a Debate on the Agricultural Holdings Bill :—' Sir, the rusticity of the Hon. Member's speech, I might even say, of the Hon. Member himself.'

² *Vanity Fair* records that Gould wound up with an allusion to the Whigs as 'that unfortunate party, dished of old, and Cavendished to-day'. Over the gulf of thirty-five years there come back to me

During his whole speech the restless war with the force of gravity has continued, and the speaker's B. A. gown has been rising and falling as either force prevailed.

Or is it the evening when the same active Mover¹ brings forward 'Cremation' and throws all his muscular passion into the opening words:—

To be burned or to be buried, that is the question. Whether the dead shall continue to poison the living, or whether, boldly disregarding a morbid sentimentality, we enter upon the wisest, the best, and the safest course.

But merely to quote this speaker's words can convey no idea of their real effect which is entirely produced

a few more words from this striking speech of a man who, given the opportunity, was certain to have risen to eminence in the political world. Speaking of a Liberal statesman of that day, who was to become at a critical moment Lord Salisbury's Chancellor of the Exchequer, and to be a future honoured Lord and Chancellor of the University, he said:—

'And then we come to Mr. Goschen, whose name seems to have been suggested more by way of a joke than anything else. But if Mr. Goschen should be accepted as leader, then indeed will Liberals have lost for ever their old and oft-repeated taunt, for they too will have taken as their guide a lost sheep of the house of Israel.'

Mr. M. H. Gould, who has most kindly looked through this chapter, tells me of an amusing speaker whom I was unfortunately too junior to hear:—

'Probably one of the most witty speakers just before my time was "Jolly Nash" of Balliol. He used to lay traps. If you ever quoted any one anonymously the members always roared "Name! Name!!"'

'Jolly Nash began a speech—"An intimate friend of my own once told me ['Name! Name!!']. He *never* told me his name," continued the speaker in plaintive tones.'

¹ W. Shirley Shirley, April 15, 1875; T. Raleigh, President, in the Chair.

by his extraordinary manner and delivery,—to be remembered by all who heard and saw him.

Or is the debate upon one of the many difficulties that rise against the dark and threatening background of the Eastern Question? The Motion before the House runs:—

That Lord Derby's Eastern Policy demands the confidence and should obtain the support of this House.¹

The debate is the shortest and one of the three speeches the finest, of a time distinguished in the history of the Union for fine speeches and remarkable debates.

After the Mover's speech and the reply of an opponent, a Balliol orator² rises and delivers a carefully prepared speech of great length, yet not a word too long. His voice is so distinct that he need not raise it—so delightful to hear that members are eager for more, but will listen to no one else.

The object of the speaker is to show that the 'Bulgarian atrocities' were grossly exaggerated, the invention in the main of an imagination steeped in sentimentalism:—

Canon McColl is sailing down the Danube, when from the deck of the steamer he descries on the bank an old coat and hat hanging on a stick, a combination of phenomena not unknown to farmers as a device for

¹ Oct. 19, 1876. Moved by the Hon. W. St. J. Brodrick, Balliol (1875); President 1878. R. F. Horton replied. R. H. Hadden, President, was in the Chair for the first time.

² A. A. Baumann, Balliol (1874); Treasurer 1877; President 1877 (M.P., Peckham, 1875-6). The debate began at 7.30 and adjourned at 9.20. Private business was very brief, no questions being asked of the Officers and all their proposals carried *nem. con.* Baumann certainly spoke for an hour and probably more.

frightening birds. Indignantly he rushes below, and in the cabin pens a letter to the *Times* on 'The Impalement of Turkish Captives on the Danube'!

A provincial mayor has made a suggestion which renders quite unnecessary and useless the ponderous volumes weighing down the shelves of statesmen: he tells us that when difficulty or uncertainty arises, the solution is perfectly simple and easy,—'for the great heart of England will leap at once in the right direction.'

But what if the great heart leaps in the dark! What if the great heart leaps before it looks!

Mr. Gladstone has expressed the opinion that the way to settle the Eastern Question is to kick the Turk out of Europe. 'He won't—won't he? Then bring me my boots!' said the Baron in the Ingoldsby Legends.

And later in the speech we are told that Mr. Gladstone 'has not got that solid base of temperament without which the brightest spirit falls to the level of the mischievous devotee'.¹

When the speaker sits down there is, after the cheering, that sort of buzz which says plainly enough 'there's no more to be said on *that* subject'. The Mover waives his right to a reply, the House divides, 208 voting for the Motion and 40 against it, and after delivering a speech that will never fade from the memory of those who heard it, the orator slips quietly home to Balliol and is unaware of his triumph until the following day.

¹ See also p. 60 for a passage referring to Bright's speeches on the Bulgarian atrocities. The above memories of this debate were written in the present year, 1910, and in recovering a few details from the past I have been most kindly helped by Mr. Baumann himself.

Or is it a later Debate¹ when the same eloquent speaker introduces the following Motion ?

That in the event of Russia putting in practice her threat of independent action, in the direction of an invasion of the territorial integrity of the Ottoman Empire, England should form an alliance offensive and defensive with Turkey.

In spite of another admirable speech his success is less marked on this occasion. There is a spirited reply by another Balliol speaker² who rises with the words 'I am no orator as Brutus is', further opposition from a third Balliol man³ who always commands the respectful attention of the House, and the Motion is finally lost,—48 in favour, 68 against.

Or the Debate may be of a wholly different kind, and the speaker⁴ in moving 'that English manias in art, learning and amusement are barbaric and unwholesome', may invite us to the playground of a Public School :—

There are our young barbarians, all at play.⁵

There they decide differences of opinion by the *argumentum ad oculos nigrum*.

The same not very popular criticism of the Public School system is urged on another occasion by an able and amusing *advocatus diaboli*⁶ who does not hesitate to attack the most exalted traditions :—

¹ Feb. 1, 1877. D. P. Barton, Corpus Christi (1873), President, in the Chair.

² B. F. C. Costelloe, Exhibitioner (1874), Balliol; Librarian 1877.

³ Alfred Milner.

⁴ Nov. 30, 1876. W. S. Sichel, Exhibitioner (1873), Balliol; R. H. Hadden, President, in the Chair.

⁵ The speaker was here of course following Matthew Arnold's use of Byron's line, in the Preface to *Essays in Criticism* (1865).

⁶ Feb. 18, 1875. H. W. Paul; A. Sloman, President, in the Chair.

And when I heard that Dr. Arnold said he was not going to trouble himself about the thickness of his praeposter's sticks, I thought that he would be better employed in mistranslating Thucydides than in bearing any part in the management of a Public School.

Perhaps it is one of the evenings when the drama or rather the want of the drama in Oxford is the subject of discussion, and the House is reminded that, while Shakespeare is forbidden, 'the Reverend the Vice-Chancellor and the Worshipful the Mayor' are quite ready to approve of a not very advanced style of Music Hall entertainment in the 'Vic.',—that death-trap appropriately entered by means of a long low vault.

Or is the subject 'Vivisection',¹ when science will be defended and the British public scoffed at by members whose work is at the Museum. At any rate they believe what they say, and have thus got a long way over the task of making others believe it also.

The House does not always laugh or applaud *with* the speaker: it may laugh or raise derisive cheers *at* him. A single misplaced word will sometimes sadly mar the climax of a speech. Thus a well-known Member proclaims, at the critical point of his oration, which may have been on the Eastern Question, or Disestablishment, or the Monarchy, or almost any other subject; for a certain type of politician rarely speaks without this sentiment:—

And from the whole of England, Sir, a cry is comin'—

T. C. Snow, Scholar (1870), Corpus Christi, had moved, 'That the so-called Public School System of Education in large boarding schools is absurd in its constitution and disastrous in its results.'

¹ See pp. 175-81.

from the Queen, sittin' on her throne, to the peasant sittin' on his cottage.

Then there is the enthusiastic Royalist who defends the Monarchy by triumphantly asserting that the Throne is the 'central screw',¹ and the Radical² who, speaking on the abolition of the Game Laws, implores the House 'to aid the poor man in keeping the wolf from his children's mouths'.

There is the orator who, in the course of an impassioned speech on the iniquity of Mr. Gladstone in holding out the bribe of a reduced income-tax, exclaims:—

The Rt. Hon. gentleman has deliberately thrown a *milk-sop* to the constituencies.

When the laughter subsides, he repeats his sentence, accompanying it with a glare of defiance.³

Again a President whose ruling has been the subject of appeal at an extraordinary Private Business Meeting,⁴ completely spoils his peroration by saying with tremendous resolution:—

Whatever else I may or may not do, I am determined that I will not hand down to my *predecessor* the authority of this Chair diminished.

But it is now getting late and the House is thin. The end of a speech is no longer the signal for half a dozen

¹ Nov. 9, 1876. R. H. Hadden, President, in the Chair.

² Dec. 6, 1877. R. F. Horton, President, in the Chair.

³ My friend Dr. F. A. Dixey reminds me of this incident which probably occurred June 3, 1875.

⁴ Nov. 14, 1876. Rev. T. H. Grose, Fellow of Queen's, Ex-President, in the Chair. The President here referred to was the same Member who in an earlier term made the curious mistake recorded in the preceding paragraph.

men to rise at once, all anxious for the President's eye. The seat round the platform is nearly bare: the other Officers have gone, and the President is left in solitary grandeur. By-and-by he has to invite Members to speak. 'Does any other Hon. Member wish to address the House?', and no one rising he continues,—'I will now call on the Hon. Mover for his reply.' After this, the subject is again read from the Chair, and then—an electric division-bell having been started to ring for one minute in each of the Society's rooms—the House divides in the manner already described in Private Business. The divisions are generally small and—unless the subject has been a very exciting one, or good speaking has been sustained to the close—afford very little criterion of the true feeling of the House. A system similar to that adopted by the Cambridge Union, of allowing Members, during the progress of Debate, to deposit their votes in a box before leaving, was tried,¹ but proved a failure at Oxford, and was abandoned.

There is no lack of amusement quite apart from the regular speeches. A loud laugh is raised as a visitor's fan or umbrella manages to insinuate itself through the open ironwork railing of the gallery and falls into the House, perhaps near to the speaker. The offending article is immediately secured, taken upstairs, and handed round the front of the gallery, until, followed by all eyes, it conspicuously stops exactly opposite the fair culprit, to her intense discomfort.

The Debate² may be attended by a young lady well

¹ Oct. 22, 1878. The system was revived later, and has now been in operation for many years.

² May 24, 1877.

known in Oxford for her intelligence, vivacity, and beauty; and now a single seat in the gallery seems to be of special interest to the House. In fact, a witty member makes the quaint suggestion to a friend that force is acting not in its apparent direction but in an opposite one, not towards the gallery, but away from it, and that President, speaker, and the whole House have no real separate existence, but are the irradiation of her charming personality!

The extreme narrowness of the gallery is such that no one can pass out or in without causing every one along the line to get up. Now a large party of ladies, escorted by a Member or two begin to make their way half round the gallery to the doorway. While the men lead the way, the ladies form the crest of the wave of disturbance, and when it passes any spot the confusion is at its height. Ladies comfortably seated resign their chairs, which are held aloft in the air by the men; the book-shelves forming the back of the gallery are denuded, and umbrellas, hats, shawls, fans, &c., are ruthlessly trampled under the feet of the invading force. But they have got round at last to the single narrow entrance, and retire through the small library for poetry and works of fiction.

Relief from the tension of Debate may also be afforded by events within the House itself.

A speaker¹ refers to another as 'the noble lord', and a Member² immediately rises to order:—

It has never been customary to allude to a speaker except as a Member of this Society.

¹ A. A. Baumann, alluding to Lord Lynton (President 1877. Earl of Portsmouth).

² Alfred Milner.

But before the President can give his ruling the first speaker, not in the least disconcerted, brings down the House with the words:—‘I withdraw the obnoxious epithet!’

The even tenor of debate is once more interrupted. A Member with a weak voice, at first completely drowned in the universal cry of ‘Speak up, Sir!’, rises at the far end of the room and timidly complains that it is impossible for him or any one sitting near him to see or hear, because of the crowd standing by the stove in the centre. This vain appeal is so often made that unconsciously a regular reply has been formulated, and the President invariably meets the complaint with:—

I must request all Hon. Members who *can* find seats to do so.

There is a restless movement in the crowd, in response to this appeal from the Chair, but as seats are not to be found, the obstruction remains.

This stereotyped reply was once the cause of a nervous President giving himself away at his first meeting.¹ It was summer, there was a great crowd and the windows at the end of the Hall were open. As soon as the President had taken his seat he was asked if it was in order for Members to enter the House through the window. He lost his head and replied at once:—

I must request all Hon. Members who *can* find seats to do so—

an irrelevancy at which the House shrieked with delight for several minutes.

¹ May 17, 1877.

The stove so often referred to is a curious construction,—two fire-places back to back and covered with a flat marble top, in the centre of the Hall. Underground flues lead to the chimney stacks. Near the stove was a large table, the occasion of the contested ruling mentioned on p. 159. Two Members¹ who could not find any other places, refused to move, and were fined £1 each by the President.² This ruling was sustained in an Extraordinary Meeting at which the two Members made extremely amusing protests.

I was speaking of interruptions to debate. A speech may be even prevented altogether by events entirely outside the House. The Mover's name is called by the President. No reply. Another call; still no reply. At the third summons a voice from the other end of the Hall gives in a single word a sufficient explanation—'Gated!'³

It must not be supposed that this is a common impediment, but it is known to occur.

During a dull part of a Debate, the Coffee-room may be visited and Members will be summoned again, if there is to be anything specially worth hearing, by the shouts that ring through the whole of the buildings when a popular speaker rises. It is wonderful to see how quickly a full house becomes empty when a poor speaker gets up after two or three good ones. In half a minute there may be fifty left, out of over three

¹ Nov. 2, 1876. J. Cowan, Scholar (1872), Lincoln, and J. M. Rigg, Scholar (1874), St. John's, Secretary 1875. F. R. Burrows asked the President whether it was in order for the two Members to sit on the table.

² R. H. Hadden.

³ Dr. F. A. Dixey reminds me of this incident.

hundred. The feelings of the unfortunate orator are not considered in the least, but the mere sight of him is the signal for a wild rush to the door. This is of course most disconcerting, but it is on the liability to these interruptions and on the freedom with which the House shouts its opinions, that the value of the experience in large part depends.

The style that is listened to is not always the most refined, but as a rule the House is acute in noting anything approaching bad taste, and emphatic in its disapprobation of it. There is perhaps too much premium set on jokes or even at times on sheer nonsense, but merriment is characteristic of English youth. The orators and their audience will learn to look at things seriously at no distant time. Let us not wish to hurry them out of their youth even if it be sometimes folly, or out of their enthusiasm, though it may be ill grounded. The time is not far off when they will perhaps long for the old feelings without the power of recalling them. To some the glowing colours will fade from the dull, heavy reality very soon. The attributes which they deemed to be part of the external world were in reality part of themselves. It is in *them* that the change is wrought. These youthful feelings of ours are among the first of the things that are—

. . . . taken from us, and become
Portions and parcels of the dreadful Past.

And the loss is all the deeper because we live to know it; because our lips are *not* dumb, but still move in the expression of changed thoughts and feelings. We are indeed sadder and wiser men, but do we not often wish

to give up some of the wisdom if by so doing we could lose a little of the sorrow also. A sense of sadness always comes over me when I attend a Union Debate. How intensely eager are the young actors! How they struggle for the posts of honour, and how cast down are they when failure comes! And so it was with me. There was a time when these aims were the most absorbing interest in my surroundings. The darkest shadow that had crossed my life was failure in a closely contested election. My greatest joy was felt when the coveted position was at last gained. And now how far off it all seems. The incidents are as fresh in my memory as if they took place yesterday, but I am not the same.

. . . . what breeds the change,—
The many aims or the few years?
Because to-night it all appears
Something I do not know again.

Note in 1910

It will be obvious to the reader that while the hand that wrote was disguised with little skill as the hand of Esau, the voice, which could not be disguised at all, was the voice of Jacob. Such impenetrable gloom does not belong to age but to the eternal romance of youth.

It must be confessed that this account of the Union in the seventies was finished before the end of 1879 by one who was President in the Lent Term of that very year! But the Calendar is not the only, nor is it always the most accurate, measurer of time. Within a few months the Chair of the Society had been abandoned for that of the inexperienced writer, but in the brief interval the course and destiny of life had been decided.

THE STANDING COMMITTEE OF THE UNION. LENT TERM, 1879.



G. V. Fiddes. A. W. Ready, Sub-Treasurer. H. B. Freeman.
R. Dawson, Librarian. E. B. Poulton, President. F. R. Burrows, Treasurer. A. H. Harding, Secretary.

CHAPTER VII

MEMORIES OF THE UNION IN THE SEVENTIES

PERSONAL EXPERIENCES

IT was my fate, in a period of under two years—from the Summer Term of 1877 to the Lent Term of 1879—to be associated with five Union elections. Of these, three were closely contested and exciting to a remarkable degree. A brief account may therefore be of some interest.

A reader with deficient imagination may perhaps consider that my words are exaggerated and the events to which they refer trivial. Ambition and hope are not the special attributes of any of the ages of man, but the pain of failure and of desire thwarted is certainly harder to bear in youth than in maturity.

I did not seek office or speak much at the Union until after my Final Schools in December 1876, but as a junior graduate entered into the life of the Society with the keenest interest. A. A. Baumann after his great speech on the Eastern Question (see pp. 60 and 155-6) was elected without opposition as Treasurer for the Lent Term and President for the Summer Term of 1877. He had hardly occupied the President's Chair

when a sudden bereavement led him to retire. On May 3rd the resignation was announced from the Chair by the Librarian, B. F. C. Costelloe, and it became necessary to elect a President for the remainder of the Term. I was at the time acting as Sub-Librarian, and many friends urged me to stand for the vacancy. On May 11th, D. P. Barton, Corpus, Ex-President, read out the names of those who had been proposed—Viscount Lymington, of Balliol, E. B. Poulton, of Jesus College, and C. H. Wade, of Magdalen (Scholar, 1873). The names of the proposers are not recorded in the Minute Book, but I remember that R. S. de C. Laffan,¹ of Merton, was kind enough to perform this office for me. The Minute Book makes no direct mention of the election, merely reporting that Viscount Lymington occupied the Chair on May 17th. As a matter of fact, the successful candidate received 298 votes, I received 296, and the third candidate a small number.²

About thirty years later Mr. C. L. Shipley, of New College, came to see me in Oxford. As soon as we met he said:—

I hope you've forgiven me for the loss of that Union election. I was dining with a number of New College men that night, and we all intended to go round to the Union and vote for you, but before we noticed it the College gates were shut and we could not get out.

At the end of the same Summer Term the Librarian

¹ Rev. R. S. de Courcy Laffan: Exhibitioner (1875: matriculation 1874), Merton. Officier de l'Instruction Publique: formerly Head Master, King Edward VI's School, Stratford-on-Avon, and Principal, Cheltenham College.

² Dr. Dixey informs me that the number 15 is recorded in his diary.

proposed me as his successor. There were two other candidates, C. V. Green, of Keble (1874), who withdrew in my favour so far as it was possible for him to do so—so successfully indeed that he only polled six votes. I received 334, and the third candidate, E. G. O'Donoghue,¹ of Exeter, 122. The result was announced from the Chair on June 7th.

I have already on p. 62 spoken of my third election, and how, after serving in the office of Librarian for a year, I was at the end of the Summer Term of 1878 proposed by J. Viriamu Jones for the Presidency against N. Micklem, of New College, proposed by the outgoing President, R. A. Germaine, of Brasenose. The result, announced June 13, 1878, was almost exactly the same as that of my first election. I polled 297—better by a single vote than the number received a year before. My opponent obtained 303, exceeding Lord Lyminster's total by 5. Another curious coincidence was the fact that both candidates came of families connected with Reading, and as small boys had been together at the same little school at Worthing.

Micklem proposed me as his successor (December 5, 1878) at the end of his term of office, while W. St. J. F. Brodrick, Ex-President, proposed E. T. Cook,² of New College. The last nomination was only a fair return; for about a year before (November 29, 1877) I had proposed A. E. Haigh,³ of Corpus Christi, for the Presidency

¹ Scholar (1874). Head Master, Kensington Grammar School.

² Scholar (1876). Editor of *Pall Mall Gazette* (1890-2); *Westminster Gazette* (1893-6); *Daily News* (1896-1901); Fellow of Winchester College; Editor of Ruskin's Works.

³ Scholar (1874). Fellow and Tutor of Corpus. Died 1905.

against Brodrick. Neither of us succeeded in depriving the other of the Chair; for Brodrick obtained 324 votes to Haigh's 196, while I received 208 to Cook's 137. The smallness of the last-mentioned poll was doubtless due to the first and only operation of a new rule, intended to discourage canvassing, which fixed the day of election at the beginning of the term following the nomination. The result was announced on January 30, 1879, and I held office in the Term at the beginning of which the poll had been taken. E. T. Cook did not have to wait long, for, the new rule having been rescinded after a single experience of its operation, his election was announced, on June 10th, as President for the Michaelmas Term of 1879, when, as I have already stated, he was the first to occupy the Chair in the new Debating Hall. He was elected after another very even poll, obtaining 175 votes to 169 received by R. Dawson.¹

At the first debate, January 30, 1879, during my term of office the Hon. G. N. Curzon, of Balliol, our present Chancellor, moved:—

that this House condemns the policy of the Opposition towards Her Majesty's Government with reference to the war in Afghanistan.

The mover was opposed by B. R. Wise,² of Queen's, and E. L. S. Horsburgh, of Queen's (1877), but carried his motion by 60³ to 39.

¹ R. Dawson, Scholar (1875), Hertford, became President in the following term (Lent 1880), having been Librarian 1878-9.

² Scholar (1877). Hon. B. R. Wise, K.C.; Attorney-General, New South Wales 1887-8, 1899-1904.

³ The published *Proceedings* (Mich. Term 1878—Easter Term

A year or two later I happened to meet Sir Wilfrid Lawson in London. 'Do you know anything of a young nephew of mine named Curzon at Oxford?' he inquired. I answered that I knew a great deal of him. Sir Wilfrid then remarked, 'He's a very clever fellow; but I said to him the other day, "You call yourself a Conservative, and yet it seems to me that all your friends are Radicals." "Well, the fact is," he replied, "the Tories are such duffers!"'

My experience as a candidate in Union elections ended in January 1879, but I had yet to conduct an election for the Treasurership during my term of office. Three candidates were nominated—B. R. V. Mills,¹ of Christ Church, proposed by R. A. Germaine, Ex-President; A. W. Ready (Scholar, 1876), of Wadham, Sub-Treasurer, proposed by the Treasurer, F. R. Burrows; and B. R. Wise, of Queen's, whose proposer is not recorded. The poll took place on March 15th, and the votes were counted as soon as it was closed. Almost at once it became evident that the voting was remarkably even, and it was also evident that great care and considerable firmness would be required. Most of the votes had been counted when a dispute arose between the excited representatives of the three candidates, and the counting had to be begun again. I then decided that each of the three sets of votes should be arranged as they were counted, in heaps of ten, each heap to be passed as correct by 1884, Oxford, 1891, p. 17) unfortunately print the numbers 50 and 39, and state the majority to have been 11. The original minutes record 60 and 39, and do not mention the majority.

¹ (1876). Rector of Poughill.

every one in the room. In this way we determined the numbers without further dispute, and they came out:—Mills—159, Ready—159, Wise—154. I had never heard of a Union election in which the casting vote was required, and yet here, suddenly and unexpectedly, the necessity was upon me, and under circumstances of peculiar difficulty.

One of the candidates was a friend who had supported me in past elections: the other was little known to me. On the other hand the prosperity of the Society depended upon the Treasurer more fully than upon any other officer. A few years later the Society wisely transferred the heavy responsibility to a senior member of the University holding a permanent post, but in 1879 the whole weight was borne by a young officer—an undergraduate or very junior graduate—elected at intervals never longer and often much shorter than a year. For this particular position I believed that A. W. Ready, who was even at the time acting as Sub-Treasurer, was the better qualified. I wished my friend every success at the poll, but when accident had determined that my single vote should decide the election, I felt that I could not support him against a candidate with the experience and qualities possessed by his opponent.

There was a stormy Private Business Meeting on March 18th, when friends of the candidate who had only just failed made various vain attempts to show that the election was invalid—attempts in no way seconded by the candidate himself. The unimpeachably correct and coldly official style of the distinguished diplomatist

who was then Secretary, A. H. Hardinge,¹ Balliol (1877), will give the reader of to-day but a faint idea of the heat that was engendered. Numerous criticisms that were urged against the conduct of the election are duly set down in order and brought to a conclusion in the record of an apology tendered to and accepted by the Chair. As a final question, disposing of all the doubts which had been raised, the Treasurer-elect

asked if the President considered that there was any invalidity in the Election. The President replied that there was none whatever.

A day or two later I discovered that I had been mistaken; for there *had* been an invalidity, although fortunately one that did not affect the numbers polled by the two leading candidates. It was ascertained thus late that a probationary Member who had no right to vote had taken part in the election. His standing ought to have been obvious and the vote refused when he handed in his name, but he had been accidentally passed by the Members in charge of the poll—mistaken I think for a full Member with the same name who had not voted at all—and the error was only detected after the declaration of the result. I requested him to come and see me and, when he appeared, said that, as he had no right to vote, I must ask him to tell me the name he had written on the ballot-paper. He had erred through ignorance, expressed his regret, and gave me the information. He knew nothing of any of the candidates but, being a Queen's man, he had voted for B. R. Wise, a member

¹ Sir Arthur Hardinge, K.C.B., K.C.M.G., Minister to Belgium.

of his own College. Thus the only result of the irregularity was to reduce Wise's total from 154, the number which now stands in the Minute Book of the Society, to 153. Whatever disappointment the future Australian Statesman may have felt at his position in this remarkable poll, he had not long to wait for compensation. At the corresponding period of the following year (1880) he was elected President for the Summer Term.

It is perhaps worth recording as a good example of advertising 'cheek' that I received the following letter from a conjuror, dated March 7, 1879:—

The President,
Union Club, Oxford.

DEAR SIR,

Will you kindly inform the Members of the Union Society that with much pleasure I shall again visit Oxford earliest opportunity.

And now in concluding my memories of a Society from which I derived such great pleasure and to which I owe so much, I print in the last pages of this chapter a short Union speech, the manuscript of which was found in an old notebook.

The following words¹ were spoken on June 15th, the final meeting of the Summer Term of 1876. Alfred Milner, President, occupied the Chair for the last time.

C. H. Wade, of Magdalen, moved:—

that considering the evidence submitted to the Royal Commissioners appointed to inquire into the practice of experimenting on live animals, this House is of opinion

¹ Subject to slight revision in 1910.

that legislation on the subject is unnecessary, and would imply an unwarranted distrust of scientific and medical men.

Two amendments were lost and the original motion carried by 39 votes to 30.

Sir, the unscientific public of England have never been able to get on without a little occasional gossip, and if a minute but detectable portion of slander is added, it only serves as a relish. Looking backwards a few months, the last popular chimera but two—the certain sudden termination of all cosmic affairs by spontaneous combustion in 1876—excited comparatively little attention, for people could not help remembering that the same prophecy was made for 1875 and 1874. After this came the Colorado Potato Beetle; which was said to be meditating an invasion of the English crops. All scientific men knew of the absurdity of the rumour and the uselessness of contradicting it,¹ and so waited quietly till the wave of popular thought, or the article which takes the

¹ Alas for the confidence of youth! Just 25 years later the pest actually made its appearance. The following account appears in the *Journ. Board Agric.*, 1901-2, viii. 147:—'During August [1901] its presence was reported to the Board of Agriculture in some allotments in Tilbury Docks, in just such a locality as one would expect to find a primary colony. The beetles had been noticed for some time, and when seen in August were breeding with great energy. Eggs, larvae in all stages, and adults were found on a large patch of potatoes. Although they were not then very plentiful, they evidently had been, for the allotment holder stated that he had been continually picking them from the potatoes for some time. The inspectors who visited the plots also found large numbers of the beetles and larvae.'

The invaders met with a warm reception and were never seen again.

'The entire infested plot of potatoes at Tilbury was burnt with paraffin, the ground soaked with the same, and then heavily dressed with gas lime, which was deeply ploughed in. All the

place of thought in the popular brain, should subside—and soon it did. Tired of the last chimera, the public began to look for another, and their choice is a singular instance of that reactionary principle which always guides popular prejudice. For while the last craze but one on the endless list of popular confusion and absurdity expressed the most wild and extravagant dread of the life of a beetle; the craze which followed expressed the most wild and extravagant dread of its death: while the one was forming laws and societies for its unnecessary extermination, the other with equal zeal is looking about for laws and has formed numberless societies for its unnecessary preservation.

But whether or not the origin of the vivisection craze may be attributed to the principle of reaction; whatever hypothesis may be entertained concerning its rise, there is not a doubt about its existence in our midst. Every gentleman who has the horse which has borne him in safety for years shot for the value of its skin, every lady who kills spiders and vivisects wasps with her scissors, can conjure up a sickly and unnatural sentimentality upon this subject, can deprecate experiments which by their result have made the science of Physiology and transformed the practice of medicine.

That excellent work *The Handbook for the Physiological Laboratory* is conspicuous in the favourite corner of the bookshelf of members of 'The Royal Humane Society'. There is a fable about the lion lashing himself into fury with his tail, but this is a perfect joke to a member of the Society I have named performing the same operation with the pages of the Handbook. We have heard of the Irish landlady who was provoked to fearful language when called a 'Parallelogram', and how she came to blows when accused of being the 'Square of the Hypo-

surrounding herbage was cut and burnt, and also dressed with gas lime. A thorough search of the surrounding potato plots for a radius of $3\frac{1}{2}$ miles did not reveal a single specimen of the beetle.'

then use'; and this conduct is absurdly like that of an anti-vivisectionist, enraged by reading of experiments described in a language of which he is miserably ignorant.

I propose to show that the reasons for vivisection are entirely adequate. We are dealing with a scientific subject and must speak the language of science, but I will not trouble the House with more technical terms than are absolutely necessary.

The Science of Physiology is the basis of the Arts of Surgery and Medicine, and any increase in our physiological knowledge reacts upon the corresponding arts and tends to their improvement and advance. Now in Physiological investigation three methods are employed. The method of *Anatomy* or dissection of the dead animal, the method of *Pathology* or studying the progress of disease, and the method of *Experiment*. Any one of these methods forms the complement of the other two. At first sight it may appear that the function of an organ may as well be ascertained by its disease as by its artificial disturbance or removal; but, leaving out of consideration the fact that centuries may elapse before Nature makes for us an experiment which may be easily performed in a few hours or even minutes, this method taken alone is open to an even more fatal objection. For disease coming on slowly and insidiously, the organism has time to mask its real effect, to throw the function of a diseased organ upon another healthy one, which may undergo corresponding hypertrophy; and such adaptation to changed conditions, which Nature always tends to bring about, will utterly delude the inquirer who entirely depends upon the study of disease for the discovery of a function. To give a single illustration, the discovery of the functions of different parts of the Nervous System was due to experiment upon live animals, and could never have been found out by the other unassisted methods.

Vivisection being, as I have maintained, perfectly

justified in the realm of experimental physiological research, it is still necessary to say a few words in its defence, from a somewhat different point of view.

Causes hitherto unknown or untried are continually being discovered or investigated. Their effects must somehow or other be tested. Every new drug must be taken for the first time by man or not man: every new inoculation must be tried for the first time upon man or not man. Logic allows no third alternative.

It is said that a pioneer of English surgery was suddenly confronted with the operation—then new and untried—of tying the great artery which supplies the leg—the Femoral Artery. He felt that to make this experiment for the first time upon man was too much for his nerves. He could not do it. He performed the operation upon a deer and then, with confidence born of actual experience, successfully performed it upon man.¹

¹ I was here quoting a story told me as a boy by a Congregational Minister, the Rev. J. F. Stevenson of Reading. When, shortly before his death, he and his wife stayed with us for the opening of Mansfield College his one desire was to see the house where Thomas Hill Green had lived. I showed him 14 St. Giles', and he took off his hat to it. He had made his nearest approach to the daily life and the personality of his great hero.

My dear old friend was opposed to vivisection in general, but approved it in the instance of which he told me. He was certainly referring to John Hunter, but the facts are not quite as he remembered them, while the argument in favour of experiments on living animals is much stronger.

Hunter tied the External Carotid artery of a buck in Richmond Park, and in a few days saw that the circulation had been restored in the developing antler. He found what had happened by means of dissection and thus 'learned how the obstruction of an artery is followed by enlargement of the vessels in its neighbourhood, so that the parts beyond the obstruction do not suffer from want of blood'. In the light of this new knowledge he ventured, in December 1785, to tie the Femoral Artery of man for the cure of aneurism.

The original experiment was made in order to test the influence of the blood-supply upon the growth of the antler—a purely

Do those who deny that vivisection is justifiable believe that man is of more value than many sparrows? Do they hold that man should provide the most striking exception to the law that the higher organism prevails at the expense of the lower?

But now, having given this brief justification for vivisection, I am tempted to think I have been foolish. Does the clamour deserve a serious answer? I think not. The restless and fickle mind of the public has, under cover of an attack upon cruelty, made an ignorant onslaught on scientific men. And when the public obtained its desire, when the Commission was appointed and the report published, not one excited agitator in a hundred reads it. Their conduct reminds me of the argument of a friend of Sydney Smith's. The celebrated wit had said in a discussion—'Well, at any rate, you'll grant that two and two make four.' 'Grant it!' said the man. 'Do you take me for a fool? Not a bit of it,—till I see what use you're going to make of it.'

And now, what will the end be? What will come of the public meddling with things which do not concern them, things of which they are utterly ignorant? Surely it is the old tale:—

Parturiunt montes, nascetur ridiculus mus.

While the storm of ignorance, folly, and passion is raging outside the temple of science, not one pinnacle is shaken, for truly its foundation does not rest on the treacherous quicksand of popular sentiment, but is firmly built into the rock of an absorbing but sane enthusiasm, and the self-sacrificing love of knowledge scientific inquiry with no apparent application in practice. It led to knowledge of vast practical importance in the alleviation of human misery.

An interesting account of Hunter's discovery will be found in *Experiments on Animals*, by Stephen Paget (Lond., 1906, pp. 13-14),—a work from which I have quoted above.

for its own sake. While outside the winds of conflicting doctrine, the hail of persecution and superstition, are contending and striving, within all is order, calmness, and unanimity.¹

The true scientific man has a patriotism and enthusiasm in his subject which is above that of country and home, and if the laws of his country prevent his quiet pursuit of scientific research, he will, like Regulus of old, from the midst of his sorrowing friends hurry away, an illustrious exile, and give to other countries the renown which should have been ours. In days gone by, thus Priestley was treated and thus Priestley behaved. Attacked by religious bigotry, he sought shelter in America, and scientific men will now leave us if this persecution is successful.

But I think that there is little chance of this. I believe in a happier future, when the growth of the sciences, including those it is nowadays the fashion to abuse, shall have spread the love of learning throughout England and produced a calmer and more philosophic spirit.

Surely we, the children of an age of science,

We the heirs of all the ages, in the foremost files of time—

shall not gild anew the sepulchres of those who in their ignorance and blind folly persecuted the prophets of science. No! The good time I am speaking of cannot be very far distant:—

The bells of time are ringing changes fast.
Heav'n grant that each fresh peal may usher in

¹ This statement, made in all the confidence of youth, may seem a little 'steep'; but after long experience I do not hesitate to express the firm belief that, at the present time, science is conspicuous in the whole brotherhood of learning for friendly sympathy and mutual appreciation between men who hold antagonistic opinions.

An era of advancement, that each change
Prove an effectual, lasting, happy gain.

and that Mind,
Time's giant pupil, may right soon attain
Majority, and speak and act for himself.¹

The concluding quotation is evidence of the period at which the speech was delivered. Who, at the present day, reads or has even heard the name of Bailey's *Festus*? And in spite of the excellence of the sentiments, I am afraid that the present generation is hardly to be blamed!

It may perhaps be recorded that the President of that day approved the speech. After the Debate was over I happened to meet one of the opposing speakers, my friend the Rev. C. H. Grundy, of St. Edmund Hall (1864), who said:—

It may interest you to know that the President was very pleased with your speech.

This was the debate at which it was rumoured that an opponent of vivisection, attacked on the subject of fox-hunting, had replied:—

Oh! But that'th quite different, becauth it'th tho awfully jolly.

¹ *Festus*, by P. J. Bailey, London, 10th ed., 1877, pp. 76-7. The lines are from the prayer of Festus, and the second has been slightly changed from a form which seemed inappropriate for the occasion.



From a drawing by W. E. Miller, 1877.

James F. Tins
George Bell

CHAPTER VIII

GEORGE ROLLESTON

BORN JULY 30, 1829. DIED JUNE 16, 1881

LINACRE PROFESSOR OF HUMAN AND COMPARATIVE ANATOMY
AND PHYSIOLOGY AT OXFORD, 1860-1881

SHORTLY before his death Sir John Burdon Sanderson remarked to me: 'It is a pity that none of Rolleston's pupils have written their impressions of him.' The following chapter is an attempt to supply the deficiency, and in writing it I have, except where it is stated otherwise, consulted neither lecture-notes nor any other notes earlier than 1905. I have thought it best to trust to the sieve of memory to retain the characteristic and reject the unessential. My knowledge of Rolleston is restricted to the last eight years of his life, from 1873 to 1881.

In the first five chapters of this volume I have tried to convey an impression of the most powerful influence that was brought to bear upon my youth—the influence of friends of the same age, and especially that of the greatest friend of all. In the sixth and seventh chapters I have revived memories of an Institution by which this influence is strongly promoted in Oxford. I now hope to give a slight sketch of the most stirring personality

it was my lot to know, as a boy and as a young man, among the senior members of the University.

Burdon Sanderson himself was a great individuality, but then he was a great investigator as well, and a great leader of investigation. He has left an undying record behind him, and his fame will be secure in the keeping of generations who cannot share the vivid memory of his magnetic charm as a man. But of Rolleston it may be truly said that the personality was the man, and that when the deep impression made by his individuality is forgotten there will be little or nothing left. For, although he was always at work, and probably worked much too hard for his health, he was in no sense a great investigator. Nor can it be truthfully said that he was a fruitful inspirer of research.

Rolleston wished to encourage original work, and was glad when it was going on in his Department, but his own principal investigations—the form of the human skull and the history of domestic animals—were too specialized and too remote from the prescribed course of study to be likely to attract his pupils. Furthermore, it cannot be said that Rolleston's researches led to any important advance: yet the subjects nearest to his heart could only have yielded inspiration when the air was charged with the contagious enthusiasm that springs from far-reaching discovery and rapid progress.

Rolleston's enthusiasm was most deeply stirred when his inquiries led him into the borderland between Science and Literature. He was fascinated above all by such questions as the domestic animals of the ancient Greeks and Egyptians, or by the attempt to explain

Caesar's meaning in the passage in which he seems to deny the existence of the beech and the fir in Britain.¹

The recent rapid growth of science in Oxford may be inferred from the number of separate Departments which now represent the subjects over which Rolleston presided. He was Linacre Professor of Human and Comparative Anatomy and Physiology.

In addition to the Linacre Professor and the Department of Comparative Anatomy, we have now a Professor and Department of Human Anatomy; in Anthropology,

¹ *De Bello Gallico*, v. 12 'Materia cuiusque generis, ut in Gallia, est *praeter fagum atque abietem*'. These words are, as Rolleston says, ordinarily taken to mean 'There is wood of all kinds to be found in Britain, as in Gaul, *except* the beech and the fir'. This was the interpretation originally followed by Rolleston himself, but he ultimately came to the conclusion that *praeter* in this passage meant 'besides' and not 'except' (*Scientific Papers and Addresses*, Oxford, 1884, pp. 780-782). Having often heard Rolleston discuss the question, I put the point to a classical scholar of Oriol, now Sir Robert Chalmers, who, after kindly considering it carefully, expressed the opinion that in this passage 'besides' was a mistranslation. I have now, thirty years later, put it to my friend Professor Robinson Ellis, who, after studying Rolleston's statement of the case, has kindly written to me, Oct. 7, 1910,—

'The words of Caesar's v. 12 most naturally mean that the timber trees in Britain were identical with those in Gaul *with the exception* of the beech and the fir. The other interpretation is hardly probable, and would, I think, have been expressed differently. Rolleston's authority as a scientific man would, in my opinion, *not* be sufficient to counterweigh the natural meaning of the words.

'Of course every scholar is aware of the double meaning of *praeter*. There are probably many other passages where the meaning is doubtful. But in *B. G.* v. 12 it appears to me pretty certain that the ordinary interpretation is right, and the other, consequently, wrong.'

two Readers and the Pitt-Rivers Department with its Curator; a Professor and Department of Animal Physiology.

Rolleston was not only keenly interested in all these branches of learning, but also in Geology and Sanitary Science. His enthusiasm for the latter was of double origin,—the subject itself was a great favourite, but it probably appealed even more strongly to him by its results, the saving of lives and the lessening of misery, especially among the poor.

Even this array of comprehensive scientific departments by no means exhausted his insatiable love of knowledge; for Rolleston's literary interests were probably quite as strong as his scientific. This immense range, unfortunately quite impossible at the present day, was undoubtedly one principal source of his personal power and charm.

When it is remembered that Rolleston also threw himself into every form of political and social activity, it will be realized that his crowded life was too full for health and too full for the continuity and the sustained thought without which the hardest worker cannot leave an enduring monument. His high moral sense, his fierce championship of the oppressed and his impatience of scheming and compromise, specially fitted Rolleston to benefit his country in a political career. The calmer academic life did not always provide a sufficient field for the exercise of these high qualities; while an impetuosity that would not be denied led Rolleston to fight for the sake of fighting, and caused much unnecessary waste of time and temper.

I owe to my friend Professor E. B. Tylor a story which illustrates the tireless activity of Rolleston's life. It is said that a friend who accidentally met him at the door of the Museum, and asked—'Can you show me something of your collections? I've just got a spare half-hour,' received the reply, 'I do congratulate you! You've got what I've been vainly trying to get for twenty years.'

Rolleston was extremely kind to his pupils and took the deepest interest in them. I remember his kindness to myself and my fellow students, and witnessed his kindness to later generations when I was one of his Demonstrators. I remember being rebuked by him for putting a large '!' at the side of the paper when a pupil had committed the enormity of placing Brunner's glands in a wrong part of the small intestine. Rolleston thought that such a mark might wound the feelings of a sensitive student; but I defended myself, knowing well that the men, who were about my own age and my good friends, would feel no grievance at my shorthand method of indicating the gravity of the 'howler'.

I especially remember one occasion in my student days when I unintentionally put Rolleston in an awkward position before his Class. In the course of a demonstration on the skeleton of the sloth and other so-called Edentata, in the Museum Court, Rolleston described the incomplete bony arch at the side of the skull (the zygomatic arch) as a feature unique among Mammals. These classes in the Court were quite informal and he invited remarks from the students. I had just been

studying the Mammalian skull, and suggested that the arch was also incomplete in certain Insectivora. Rolleston adhered to his former statement, I to mine, and he accepted my offer to go for the reference. My friends told me that while I was bringing it, Rolleston, after making some kind remarks about me, added 'but he's wrong this time', so that he had committed himself irretrievably, when I returned with Flower's *Osteology* in one hand and the skeleton of a mole, proving that Flower was right, in the other. This was in the year 1876 when I was under twenty-one, and a man of Rolleston's age and position might quite unconsciously have developed a little coolness, but he showed no abatement whatever of the kindly interest he invariably displayed towards me as a student.

More than once he voted in a Union election at my request. 'I'm an old bird, but I've never done this before,' he remarked, as he followed the directions for recording his vote on the first occasion.

Looking through the letters I received from Rolleston I only find one written during my student days. It was certainly a very kind and encouraging letter for a young man to read. It is dated August 15th, 1876, and addressed to my father's house in Reading. Rolleston had lectured on 'Distribution of Species' in the Summer Term, and had evidently given a set of questions to the students at the end of the course.

MY DEAR MR. POULTON,

Your answers are very good; the only thing I wish to see different is the writing only on one side so as to leave room for comments. Very few would be wanted;

still I could write here and there a few remarks on the page opposite if it was left blank. I wish you had got rid of Examinations; I could have got you into a very good place just now if you had been a B.A. But there are as good fish in the sea as ever came out of it, and when you have got rid of these Examinations you will be sure to have a place found for you.

I am very interested in all that concerns Distribution,—and I have read what you say with much pleasure. The other day I came on a great blunder of Wallace's; he says no true *Sus* exists in the Æthiopian Region. But in the British Museum cellars I found two skulls of a true *Sus*, and having faith in Wallace I told Gerrard¹ that they were wrongly labelled. But on hunting the subject up further I find Wallace is wrong and that the skulls were right.² This is what one would expect; for where we have *Hippopotamus*, *Phacochoerus*, and *Potamochoerus*, why should we not have *Sus*? Where we have *Didunculus* and *Goura* we have the typical Pigeons, and so with the other Orders.

I will return your papers shortly.

I am,

Yours very truly,

GEORGE ROLLESTON.

The same arresting individuality which impressed his pupils so deeply, made Rolleston a great social force—all the more so because he had charm as well as power.

¹ An attendant in the British Museum, who died only a few months ago, aged 99½.

² Rolleston was mistaken. My friend Mr. Oldfield Thomas, F.R.S., writes, Oct. 11, 1910:—

'No true *Sus* occurs in Africa south of the Sahara. It is there replaced by *Potamochoerus*, but Rolleston may have mistaken female skulls of the latter for *Sus*, as the differences are really very slight, and many people have doubted if the genera should be kept distinct.'

One day, probably in 1876, the young lady mentioned on pp. 160-1, came into the Court of the Museum where the students happened to be at work, and those of us who were happy enough to be her friends at once began talking to her. Rolleston came up and I well remember the humorous twinkle in his eye, as he told her that she must really go away or no work would be done.

A keen sense of humour is not essential to a dominant individuality, but it is a splendid accession; and Rolleston possessed it in full measure. He was always on the alert for the comical aspect of incongruity, and his hearers were made to realize it also by the expression of his voice, the half smile and amused look in the eyes. For this reason I fear that his recorded words must lose a large part of the force they possessed when he spoke them. How much they will lose I am unable to judge.

A man of Rolleston's nature was bound to be a partisan, but, as I have already said, he did not suffer the usual fate of the partisan, the loss of a sense of humour. He could sometimes at any rate see admirable or interesting qualities in an opponent. Thus I have heard him express the utmost enthusiasm for the masterly way in which the Conservative candidate, Mr. A. W. Hall, managed his horse in the crowds at an election. 'It almost made me change my mind,' he said, 'although it could never have changed my vote!'

One of the most marked of his curious prejudices was that which he displayed against the Celts, and he was much puzzled by a brilliant student, now one of the

most distinguished of the Oxford medical graduates. 'I can't make out —,' he used to say, 'he's a Celt, and yet he does so well; but I'll tell you what, *I wish he wasn't a Celt!*'

Rolleston's lectures were of the greatest value to the advanced student who already possessed a grasp of the subject as a whole. Such a man was helped and not disturbed by the flash-light which the speaker turned now on this aspect now on that, and then again upon something entirely remote.

The young inexperienced student carried away one supreme gift—enthusiasm and intellectual elevation. Here was something splendid, and it was put before him by the most splendid personality he had ever met—more splendid than anything that he had imagined. These were my feelings when, not long after my seventeenth birthday, I began to attend his lectures in the Summer Term of 1873. But without the knowledge to fill in the background and restore to the subject some harmony and arrangement, the strongly illuminated points stood out sharp and disconnected, and formed as a whole a very imperfect presentation. And yet the illumination had been so brilliant that to the young student each point seemed to be a massive contribution, and the whole a complete exposition. The light had been so strong that the inexperienced hearer gained the mistaken impression that the whole subject was completely illuminated, and that there was neither darkness nor shadow in any part of it.

In lecturing and public speaking generally, Rolleston's

sentences were remarkably long and complicated, positively bristling with dependent clauses, and yet he did not lose the construction, as most speakers would have done, but preserved the grammatical symmetry to the end. It was not a good style, and for almost any one else would have been a hopeless style. But Rolleston's memory secured continuity, while his striking individuality so gripped the audience that they too were able to wind their way through the maze of his speech. I have been told that Professor Henry Smith, the ablest man of his day in Oxford, said to his friend :—

When you are speaking, Rolleston, I look at you with wonder. Again and again I say to myself 'Now he's done for!'; but, no, you always come out all right in the end.

Rolleston read largely in many languages, and quotations from the Classics as well as from French and German were freely scattered over his lectures. Even for such a familiar expression as 'mere child's play' he preferred the German equivalent.

It is a curious fact that, in spite of this marked predilection, his pronounciation of German was singularly bad. I have heard his great friend Professor Max Müller express an amused horror at the thought of it.

The want of system and method which detracted so greatly from the value of his lectures was shown forth in the rumour, which may have been invented, but if so was well invented, that he once began with the words :—

Our subject this morning is the stomach of the dog : I therefore propose to explain to you the stomach of the cat.

How much the students felt that they lost by Rolleston's discursiveness and want of arrangement may be inferred from the opinion, expressed by one of them to me, that the ideal lecture would be prepared by the Senior Demonstrator, Dr. W. Hatchett Jackson, the present Radcliffe Librarian, and delivered by Rolleston.

It is certain that Rolleston was a better lecturer at an earlier period. My friend Dr. W. Hatchett Jackson tells me that, in his student days beginning in 1869, Rolleston's lectures were far better than they became in later years. The last years of Rolleston's life were passed under the shadow of a terrible disease, and his natural excitability was heightened by the ever-increasing number of causes into which he threw himself with a fierce zest. Although I can warmly agree with all that my friend Dr. A. G. Vernon Harcourt says of his knowledge, enthusiasm, and power of apt quotation, it would be incorrect to describe as admirable the ill-arranged discursive addresses to which I listened in 1873 and later years. But in the following words Dr. Vernon Harcourt was speaking of 1858:—

Dr. Rolleston was an admirable lecturer and teacher, full of knowledge and enthusiasm. He would illustrate his lectures on natural history and comparative anatomy with apt quotations. For example, in speaking of the pre-eminence of mankind, he would declaim :

Pronaque dum spectant animalia cetera terram,
Os homini sublime dedit coelumque tueri.

Or again, when he had to tell his class that the *hippocampus minor* (a lobe of the brain), on which great hopes had been based, did not serve as a distinguishing feature

between man and the ape he would repeat with a sigh of regret :

Simia quam similis, turpissima bestia, nobis!

He was long one of the chief pillars of natural science in the University.¹

The well-known Oxford saying, 'No one could be so wise as Dr. Routh looked,' may be adapted to this interesting personality. 'No thought could be so penetrating as Rolleston looked when he uttered it.' But still the thought was penetrating,—how penetrating the reader can decide more truly than the writer; for, when Rolleston's words are recalled, the dominating individuality of the speaker must ever rise before the mental vision of one who saw and heard him. To such an one the following words and ideas from his lectures gain an arresting force and interest never to be wholly understood by others.

Nearly the whole of the examples that have branded themselves on my memory were spoken in the course of lectures or demonstrations on physiological subjects.

On the subject of the adipose tissues I remember his saying that a practical illustration of the value of fat as a cushion was given at the very moment of instruction:—

For—the—lec—tur—ER—stands-upon-it,
and—the—lec—tur—EE—sits-upon-it.

He was also fond of telling us that St. Paul, in the words 'our uncomely parts have more abundant comeliness', was referring to the pleasantly rounded outlines produced by a padding of fat.

¹ *Cornhill Magazine*, March 1910.

Another very characteristic and characteristically spoken, twice repeated, sentence of his comes back to me from his lectures (Lent Term, 1876) on the digestive system :—

That's-the-way-you-ought-to-speak-of-a-stomach,—
pulpy,—vascular,—glandular,—pepsiniparous.

The last word and the first ten were spoken with marvellous rapidity, the other three also rapidly but each sharply cut off from others by pronounced pauses.

A quaint aspiration, which abides in the memory, was expressed in his lectures on the circulation. He told us how, during an exhausting climb up a mountain in Greece, he had longed for a 'moderator band' like that in the heart of the sheep—a muscular column passing from wall to wall of the right ventricle and helping to sustain it in times of excessive and exhausting stress. And he explained that he endeavoured as far as possible to supply the want by throwing himself on the ground face downwards and strongly pressing upon his chest over the region of the ventricles.

Rolleston was ever fascinated by the broad and interesting questions which grew out of the detail of the science he was teaching,—attracted more rather than less when they were unanswerable.

Thus he would wonder at the mammal's excretion of nitrogen in the form of urea dissolved in a quantity of fluid, which, being lost at the temperature of the body, was so wasteful of heat. He would tentatively suggest that the form of the excretion was a consequence of the impossibility of nitrogen leaving the

body as one of its gaseous compounds (cyanogen, ammonia, &c.) because these are poisonous or irritant. The essential problem, however, is not the urea itself but the water in which it is dissolved ; for, as he used to insist, one cause of the high temperature of birds—even higher than that of mammals—may be found in the fact that their waste nitrogen is not got rid of in solution but in the solid state. As other reasons he suggested that feathers are worse conductors than hair, and that bright colours radiate off heat less than dull ones.

Upon the same subject of animal heat Rolleston pointed to the difference between the food supplied to the developing bird and the young mammal, and led us to conclude that sugar was probably a heat-producing food ; for the bird's egg, kept at a uniformly high temperature by the body of the parent, contains everything that is supplied to the young mammal except sugar. The presence of this substance in milk may therefore be related to the greater need for warmth.

Rolleston's account of the progressive stages of intoxication (Michaelmas Term, 1876) I have adapted from notes made in his life-time, although some years after my attendance at his lectures.

He used to tell us that after the first well-known cerebral effects, manifested in conversation and in general bearing, alcohol next shows itself by its action on the cerebellum—'the bilateral co-ordinator of movements.' The first muscles to be rendered inharmonious are those of the eyes, and the man 'sees double'. Then

quickly follows the loss of all properly regulated control over the general muscular apparatus.

Beyond this stage the deep-lying nervous masses at the base of the brain are affected and the man becomes incapable of sensation or movement, lying in a profound stupor. In this condition he may be run over and submit to injuries which by shock alone would have been fatal to one who was sober,—the explanation, Rolleston told us, of the saying, ‘the fairies take care of tipsy folk.’

After this last stage, in which the organism lies a mere machine,—all the necessary vital operations sustained by the simplest nervous circles,—there follows, when sufficient alcohol has been taken, the final fatal stage. Then the *medulla oblongata* itself is rendered functionless, the ‘nœud vital’ is unloosed, and death follows the stupor as the effect creeps downwards over this last fundamental part of the nervous apparatus.

My friend Sir Ray Lankester has told me of an interesting generalization of Rolleston’s which I do not remember in any of his lectures—the conclusion that the power of regenerating lost parts is characteristic of aquatic as opposed to terrestrial forms of life, of newts rather than frogs and toads, of Crustacea rather than insects.

Speaking on Classification, he was fond of the Darwinian teaching that the old metaphors derived from lines, or ladders or stairs are fallacious, and that the true image is the branching of a tree.

Lecturing on the distribution of animals in the

Summer Term of 1876 Rolleston used a striking and excellent metaphor for the balanced combination that is set up between the ancient inhabitants of a country. Such an equilibrium is established in a part of the earth's surface cut off from the rest by a barrier, as South America has been by the submergence of the isthmus. Then later on when land connexion is re-established a new barrier is found to have taken its place—that of a stable condition of mutual interdependence between living forms in a long-isolated area.

Hence, as Rolleston expressed it, when physical barriers are removed invasion is still opposed by 'an army of all arms'. He would also express the conclusion that it was food and not climate which determined the range of warm-blooded animals by saying that they were 'bad thermometers', telling us little of the temperature of countries in which they were found.

Rolleston was fond of illustrations derived from warfare. I have already given an instance from his lectures on Distribution. Then in a lecture on respiration, speaking of the condition of pneumothorax, he would draw on his experience in the Crimean War and tell how the soldiers were instructed to give the bayonet a twist so that air could at once rush into the cavity of the thorax, disabling an enemy in a moment by collapse of the lung.

He would also tell us, not perhaps as illustrations, but simply as arresting conclusions thrown in because of their intrinsic interest, that the bronze sword could never have been beaten by soft iron,—steel was required to render it an anachronism, that for men fighting in

ranks the slashing or chopping weapon could never meet the piercing one.

I have spoken of Rolleston's vast intellectual horizon. Such a man was certain to encourage breadth in the student who came under his influence—lofty social, political, and literary ideals, and in science a keen and sympathetic outlook on the main discoveries in branches not one's own. Thus the subject of his course in the Lent Term of 1876 was 'Digestion'; and in beginning the lecture on February 29th he expressed the hope that all the students had heard Mr. (now Sir William) Crookes on the Mechanical Action of Light,¹ at the

¹ The old minute-book of the Ashmolean Society is unfortunately missing. The *Oxford and Cambridge Undergraduate's Journal* for Thursday, March 2, 1876, gives a brief abstract of the lecture, which it states was delivered on 'Monday evening'. My friend Sir William Crookes has kindly tracked the date by reference to his correspondence, and finds that the Monday was Feb. 28th.

Professor Odling was in the Chair, and introduced the lecturer.

Sir William writes, Oct. 20, 1910—

'Ruskin [who had probably been brought by Dr. Acland] took in my wife, who sat next to him during the lecture. He said some complimentary things to her and after the lecture was over I had a long chat with him.'

Lady Crookes tells me that Ruskin was extremely pleased with the experiments, and especially struck by the behaviour of the undergraduates. He remarked on this again and again, and said that he had never known them to be so quiet and attentive, and that it was a remarkable tribute to the lecturer. These memories are of special interest because Ruskin's treatment of another Ashmolean lecture, seven years later, was so different (see pp. 249, 250).

Although the lecture of Feb. 28, 1876, was never published, the *Proceedings of the Royal Institution* contain a full account of a still more complete exposition of the same subject. Sir William kindly writes, Oct. 29, 1910:—

'On Feb. 11, 1876, I gave a Friday evening lecture at the Royal

Ashmolean Society the night before. With true prophetic instinct he said impressively, and then again repeated the words,—‘An Epoch-making Lecture.’

Rolleston was fond of highly coloured and exaggerated statements. I have heard him say that if a certain preparation did not support his account of the blood of an earth-worm,—‘I’ll eat the worm itself—raw.’

Always striking, his sayings were often picturesque. Not long before his death he went to Malvern and saw the remains of the supposed Cambrian coast-line running along the Archaean hill-side and including, as was believed at the time, fragments derived from its waste. The evidence, as it was then understood, seemed to show that, even at the remote epoch of the Cambrian sea, the pre-Cambrian rock of the Hills had been changed into its present form. ‘It makes one draw a long breath’ I heard him repeat twice.¹

On one occasion when he was visiting a chalk district, I think Cissbury, an old man told him that his son had a theory to account for the flints in the chalk. Rolleston said he should like to know it, as the question was a very difficult one. The man replied that his son was too shy to appear himself, but that his theory was that the flints

Institution on the Mechanical Action of Light. My lecture at Oxford was as full an abstract of the R.I. lecture as I could give considering the apparatus had to be brought from London, and the facilities for showing experiments were imperfect.’

¹ My friend Professor W. J. Sollas, F.R.S., has drawn my attention to Professor T. T. Groom’s paper in *Quart. Journ. Geol. Soc.*, 1899, vol. lv. In this important monograph it is shown that the older conclusions on the relations between the Cambrian and the Archaean of the Malvern Hills are erroneous.

were just the crystals of the chalk. Rolleston remarked:—

Well, the only objections I know of to the theory are that the flint is not chalk but quite a different substance, and that it is not crystalline but a hardened jelly. Except for these difficulties there is a great deal to be said for your son's theory!

In order to appreciate the effect of these words one must remember the running half laughter which accompanied them, breaking out into hearty laughter at the end.

He said of one who had recounted various doubtful stories:—

— kept saying the things which are generally unsaid, and revealing the parts which are generally concealed; in fact he,—behaved like a gentleman!

The treatment said to have been meted out to such conversation by Jowett was subtle and effective. It took the form of the quietly incisive rebuke—'Don't you think we'd better join the ladies?'

Rolleston was contemptuous of those biologists who shrank from physical contact with a dissection. How far he was from feeling this form of squeamishness himself is sufficiently shown in the following incident.

A prolific source of acrimonious dispute at meetings of the British Association which followed the publication of the *Origin of Species* in 1859, was the so-called Hippocampus Minor of the human brain and its bearing upon the resemblance between man and the ape. The

discussion is parodied in Kingsley's *Water Babies*, published in 1863. At one of these meetings a speaker regretted that he had not got a monkey's brain on the spot in order to demonstrate a particular point. 'I've got one in my pocket', said Rolleston, speaking as if a monkey's brain was the very thing you would expect every one to carry about with him, and producing it, to the delight of the audience.

Nevertheless in certain respects Rolleston exhibited a strange and in such a man a surprising timidity of public opinion. The late Sir William Flower told me that when a learned and valuable paper on circumcision was offered to a London society, Rolleston strongly and successfully opposed its acceptance,—certainly a remarkable instance of squeamishness in a scientific man.

Another indication of timidity is recognizable in the carefully guarded sentences in which Rolleston wrote of evolution in 1870, eleven years after the appearance of the *Origin*.¹

Rolleston held very extreme views on the temperance question, and I well remember the way in which he expressed them at a meeting of the Ashmolean Society when one of our most distinguished men, the late Professor J. O. Westwood, read a paper on the great pest of the vine, the Phylloxera. Celebrated throughout the world for the volume of his minute and accurate researches, in public speaking the Professor was sometimes led into curious mistakes. I have been told by one who

¹ *Forms of Animal Life*, Oxford, Ed. 1, 1872, xxv.

was present that, at a Gaudy Dinner at Magdalen, he remarked in a speech:—

Well, gentlemen, as we all know, man arranges, but God disarranges!

At the Ashmolean he spoke of the Phylloxera as a curse—

for I look on wine as a good gift of God which maketh glad the *face* of man,

and the cheery countenance of the speaker seemed to make the mistake peculiarly appropriate. Upon the wall were drawings of the complicated life-history of the pest, but these the Professor plaintively confessed that he could not describe in the presence of ladies. The confession itself was slightly embarrassing, although no one would have been a penny the worse for the loves of the Phylloxera or for the large part of its reproduction that is carried on without any display of the tender passion. And, strangely enough, it was this latter vapid unromantic process that seemed, even more than the other, to embarrass the speaker.

But in recalling memories of one deeply interesting personality I have been led away by memories of another who has left upon learning a far deeper footprint.

I was telling of Rolleston's intemperate temperance, and he illustrated it at the Ashmolean that night, giving to Westwood's words another and an opposite application, and speaking of 'that good gift of God, the Phylloxera!' Yet Rolleston had the curious habit of contemplating with a sort of amused sympathy the feelings

of those who were astounded at his own extreme views. Thus I have heard him tell with evident appreciation of the exclamation made by a Cambridge friend to whom he expressed his intention of speaking at a temperance meeting. 'He used the English equivalent of *Bon Dieu!*' was Rolleston's characteristic way of putting it. This was in April 1879, when he was staying at my father's house in Reading, on the occasion of a meeting in which he took part.

Rolleston's excessive impetuosity, combined with his extreme fluency and the ease with which he could say striking things and command attention, probably carried him away and led him to speak too often. I was of course far too young to know this from my own experience, but I once heard Henry Smith tell Rolleston that a member of Council had made a note of the number of times he had spoken at a particular meeting. The fierce resentment which Rolleston displayed, and his violent abuse of the member in question, whom he compared to a savage, not only of the lowest kind but ridiculous in his degradation, led me to conclude that the implied criticism was well founded.

It was probably after such a meeting as the one alluded to by Henry Smith that my friend who became afterwards the Master of University met Rolleston coming back from Council.

'Ah! Macan,' he said:—

The time spent in University business is well described by a line from Myers's *St. Paul*:—

Drunk of the sand and thwarted of the clod!

One of his demonstrators describes him coming home about five o'clock one afternoon after a stormy meeting. 'He came into my room and said, "After this meeting I shall take a walk round the Parks. I feel tired." "I thought you enjoyed meetings," said I. "So I do," he replied, "and there was a rampage to-day, and where a rampage is (pointing to himself), there is *he*." I laughed, and he said, "Yes, I know what you are laughing at—you think where *he* is, there is a rampage—and you are about right."'¹

Rolleston found the command of language serviceable for the expression of his strong and even violent antipathies. I remember a meeting of the Ashmolean Society at which he made a savage onslaught upon a gentleman present, keeping his eye firmly fixed upon him. Afterwards I heard him say, 'I saw that he felt it; for I had my eye on him the whole time.'

Rolleston did not always have it his own way; he was sometimes beaten, as on the occasion referred to below.

At the terrible accident on the Great Western Railway at Shipton, near Oxford, a great strain was put upon the resources of the Radcliffe Infirmary, and makeshift arrangements were imposed by dire necessity. Rolleston bitterly attacked the administration, and at a meeting of the Board of Management Mr. Symonds, the Surgeon of the week, replied. I have been told by one who was present that he ended the speech in which he described the extraordinary and terrible circumstances, with these words:—

But in all this exceptional difficulty and stress we

¹ *Scientific Papers and Addresses*, Oxford, 1884, I, liv. Dr. W. Hatchett Jackson tells me that he was the demonstrator referred to in this passage.

have received the most loyal and devoted assistance. To this there has only been one exception,—a single man who has throughout made our difficulties greater and hampered us in every way in the attempt to grapple with them: that man is Professor George Rolleston.

For once in his life Rolleston had nothing to say.

An example of Rolleston's controversial style is quoted below from his Presidential Address to the Biological Section of the British Association at Liverpool in 1870. He had evidently been 'drawn' by the chaff of a literary opponent:—

A purely literary training, say, in dialectics, or what we are pleased to call logic, to take a flagrant and glaring instance first, does confer certain lower advantages upon the person who goes through it without any discipline in the practical investigation of actual problems. By going through such a training attentively, a man with a good memory and a little freedom from over-scrupulousness, can convert his mind into an arsenal of quips, quirks, retorts, and epigrams, out of which he can, at his own pleasure, discharge a *mitraille* of chopped straw and chaff-like arguments, against which no man of ordinary fairness of mind can, for the moment, make head. It is true that such sophists gain this dexterity at the cost of losing, in every case, the power of fairly and fully appreciating or investigating truth, of losing in many cases the faculty of sustaining and maintaining serious attention to any subject, and of losing in some cases even the power of writing.¹

A part of the description might have been applied by an antagonist to Rolleston himself, with his wonderful memory stored with oddly assorted facts and sayings.

¹ *Scientific Papers and Addresses*, II, 852.

It would have been an unfair picture, but there would have been likeness,—the likeness that belongs to caricature.

Rolleston's strength and weakness in science are equally well shown in the history of one of the most interesting and economically the most important of the researches ever carried out in the Department of the Linacre Professor. His confident and impressive utterances and dominant personality compelled attention, conquered British indifference to research, and secured the necessary means for its pursuit.¹ On the other hand, his grasp of the methods to be followed in the inquiry itself was imperfect. He allowed himself to be biased in favour of one set of experiments when he should have advocated many, and the able young worker,² who threw himself into the investigation with admirable zeal, pertinacity, and resource, was impelled to waste much valuable time in testing and re-testing the ill-founded conclusions at which his Professor had arrived. Thus it came about that while it is to Rolleston's credit that the complicated and difficult life-history of the liver-fluke (*Fasciola hepatica*)—that terrible pest of the sheep—was unravelled in this country, and

¹ Dr. W. Hatchett Jackson informs me that Sir Thomas Acland and the Duke of Bedford took a leading part in inducing the Royal Agricultural Society to make the grant (see p. 208) which led to such fruitful results. Dr. Acland, influenced by Rolleston, communicated with his brother Sir Thomas, who in turn enlisted the interest of the Duke in the good cause.

² A. P. Thomas, Scholar of Balliol; Professor of Zoology, Auckland University, New Zealand.

at Oxford, it was also due to him that the discovery was made far later than it should have been, and that the glory of it was shared between a young English and a veteran German zoologist.

The flat leaf-shaped parasitic worm or 'fluke', commonly found in the liver of the sheep and the cause of 'rot', is, as the Oxford Dictionary informs us, so called because of its resemblance to a fluke or flounder. It was well known that allied parasites of the same group (the Trematoda) went through a complex life-history in which two very different animals (or hosts) were inhabited. Reasoning from these allied forms, it was inferred that the animal, the 'intermediate host' as it is called, attacked by the earlier stages of the liver-fluke was some kind of mollusc.

The immense importance of the problem may be judged from the fact that in the winter of 1879-80, three million sheep are believed to have been killed by fluke in the United Kingdom. If, however, a mollusc was a necessary link in the chain the species was wholly unknown, and there were not wanting those who argued that the sheep were directly infected by the ova which pass out of them in countless numbers, that in this case the cycle was comparatively simple and no earlier host required. It was partly in order to answer this latter hypothesis, advanced by Dr. J. Harley, that Rolleston wrote a letter to the *Times* of April 14th, 1880, which led to the offer on June 2nd of a grant by the Royal Agricultural Society of England. Rolleston recommended to the Society one of his pupils and demon-

strators, A. P. Thomas, who began the inquiry on June 7th, 1880.

Rolleston, in his letter to the *Times*, drew attention to an important statement made by Willemoes-Suhm,¹ that sheep-rot was very prevalent in the Faroe Islands with only eight known species of land-molluscs—a most valuable indication of the scope of the inquiry which should be first pursued. Four were slugs, and four snails, while much the commonest species was the common grey slug, *Limax agrestis*, which Willemoes-Suhm therefore thought might be the culprit. Rolleston, on the other hand, expressed strong suspicions of the black slug (*Arion ater*). The reasons he advanced were extremely unconvincing, and it is obvious that the proper scientific method was to test all the eight molluscs known to occur in the Faroes, one after the other and as soon as possible.

A. P. Thomas very soon solved the fundamental problem—how to make the experiment, how to obtain active embryos from the eggs of the fluke passed by the sheep. He had only to bring the active embryos into contact with every one of these eight species, for it to be almost certain that the discovery would be made. But unfortunately Rolleston had assumed in his letter to the *Times* :—

As a matter of practice at any rate there is no need to tell farmers to be on their guard against snails which do not infest their pastures, and of the eight just specified they need usually in England only look to the

¹ *Zeitsch. f. wiss. Zool.*, 1873, xxiii. 339; see also pp. 24-5 for a description of this fine naturalist, too early lost to science.

black slug and the gray slug. Willemoes-Suhm suspected the gray slug, I suspect the black slug.¹ . . .

The reasons for this summary dismissal of the snails from the problem are given earlier in the letter, and they are very insufficient. The snails, although air-breathing, are inhabitants of fresh water, and Rolleston had been told by the farmers of the Lake District that, while sheep were especially likely to get the disease in pastures liable to be flooded, they also contracted it in damp places beyond the reach of floods. There were two obvious weaknesses in this argument. The farmers may have been mistaken in their conclusions on a very difficult and intricate question, or the water-snails may be able, by means of ditches, &c., to extend beyond the reach of the floods. Yet so strong was Rolleston's faith in the assumption, that his young pupil was impelled to spend what turned out to be most precious time in repeating long and difficult experiments ever attended by negative results, instead of going on to test the other species. I well remember his laments

¹ In his paper, dated June 25th, 1880, in the *Zool. Anzeig.* for August 9th, 1880, p. 400, Rolleston repeated his earlier suspicions of the small black slug in these words :—

'I . . . should wish to be understood to be of opinion that it will—as I hope, by means of experiments now being carried on in my laboratory by Mr. A. P. Thomas—be ultimately shown that the smaller of our two British Arions really is one at least of the hosts infested by the sheep-fluke. . . .'

The whole paper containing this statement was reprinted, presumably with Rolleston's consent, in Thomas's memoir, dated January 1881, in *Journ. Roy. Agric. Soc. Engl., S.S.*, 1881, xvii. 1. It is interesting to read this conclusion thus printed (on p. 12) in a publication which (on p. 22) furnishes an entire refutation of the evidence on which it was based (see p. 212 of the present volume).

to me over the wasted time. Wet cabbage leaves with numberless embryos swimming in the film of moisture, were gaily eaten by slugs which, after laborious dissection, revealed not a trace of the expected parasite. Nor were more hopeful results obtained in other experiments in which

water, containing perhaps several hundred or thousand active embryos, [was] poured over slugs [both black and gray] confined in a small vessel. . . . The embryos were watched under the microscope and seen swarming about the slugs, swimming around them, and occasionally stopping to bore, but one was never seen actually to penetrate the integument of a slug.¹

In the meantime, acting on the advice of his friend W. Hatchett Jackson, the Senior Demonstrator, A. P. Thomas had been pursuing his investigations in circumscribed localities near Oxford where it was known that healthy sheep had become infected.

Jackson, a resident in Oxford, was able to make effective inquiries and to fix upon several suitable localities. Among these were five fields on the slope of Wytham Hill, considerably above the level to which the floods are known to reach. Not only had sheep been infected in this area, but rabbits were dying from the same disease in the adjoining woods on Wytham Hill. These fields were searched thoroughly, by night as well as by day, and the species captured brought home and examined for the early stages of the fluke. The species were not numerous, but among them

¹ For an account of these and other experiments see A. P. Thomas in *Journ. Roy. Agric. Soc. Engl., S.S.*, 1881, xvii. 14.

moderate numbers of a water-snail, found in the Faroes, were captured in a marshy place in one of the fields by W. H. Jackson, who used to help his friend in collecting. This was the small snail *Limnaeus truncatulus*, and, found 15 to 20 feet above the level reached by the floods, it entirely destroyed Rolleston's argument. And refutation was not confined to Wytham; for Thomas was able to affirm, after an experience of several localities in 1880:—

I have not found any sheep-rotting ground where careful search has not revealed some water-snails.¹

In one of the Wytham water-snails, found September 24, 1880, and kept in an aquarium, Thomas discovered, on December 22nd, an organism which he then suspected, and a year and a half later *knew*, to be the long-sought-for earlier stage of the fluke. He wrote of it in his paper dated January 1881:—

The structure and habits of this cercaria render it possible that it may prove to be the larva of *Fasciola hepatica*.²

But it was too late to obtain the proof in 1880, and, as it turned out, it was impossible to obtain it in 1881; for in this latter remarkably dry year no living specimens of the snail could be found. A single one of the useless experiments upon the black slug in 1880 would, if made upon this little snail, have solved the problem at once; and as soon as Thomas was at length able, in July 1882, to get the snail, the problem *was* solved.

¹ *Journ. Roy. Agric. Soc. Engl.*, l. c., p. 22.

² *Ibid.*, p. 20.

The embryos, hatched from the eggs of the fluke, bored into and entered the snails whenever they met them.

Before the end of August 1882, Thomas had studied the development of the parasites within the snail until they arrived at stages precisely similar to the one he had recognized and described in the specimen from Wytham. His paper was drawn up for the October number of the *Journal of the Agricultural Society*, sent to the printer on September 1st, and the entire issue printed off by October 2nd. Copies were received for distribution on October 24th, but the journal was not published till nearly the end of the month. But in the meantime the same discovery was announced by Professor Leuckart, the great German parasitologist, in the *Zoologischer Anzeiger* for October 9th. In *Nature* for October 19th Mr. Thomas published a *résumé* of his investigations.

I have described the discovery at some length because of its many points of interest:—the fine example which it affords of scientific reasoning and method; its deep human interest; its scientific importance; the great practical issues which are at stake. For these reasons I have added in as simple and non-technical language as I can command a brief account of the essential facts which were given to the world in the great discovery made by Professor A. P. Thomas not long after his student days (see Appendix V, p. 315).

Rolleston's scientific writings, without the compelling force of his majestic presence, appear to be on a level altogether lower than his lectures and conversation; and

the most scientific are the least successful. His publications are in fact at their best when they are most discursive and when, as in his lectures, he could not restrain his interest and enthusiasm from glancing in every direction. When he adhered closely to his scientific text he was pedantic and dull. For sheer aridity and indigestibility it would be hard to find the equal of his short paper 'On the Geographical Distribution of *Limax agrestis*, &c.'¹; and it would be difficult to imagine anything more likely to repel the beginner than the following description of the Bugle Coralline in his student's textbook²:—

The Polyzoary is plant-like, erect, calcareous, dividing dichotomously, the internodes articulating by flexible chitinous bands . . .

The cells are arranged quincuncially round an imaginary stem, and divide the surface of the internodes which they make up, into more or less regularly rhomboidal or hexagonal spaces

Such compressed information—like pemmican for the most inhospitable of climes—is the natural nutriment of an age that values examination as an end in itself and not as a means of inspiring interest or stimulating thought.

In 1863, a few years before the first edition of *Forms of Animal Life* was written, Rolleston's views on exam-

¹ *Zool. Anzeiger*, 1880, iii. 400; *Journ. Roy. Agric. Soc. Engl., S.S.*, 1881, xvii. 1.

² *Forms of Animal Life*, Oxford, Ed. 1, 1870, p. 73. The valuable and comprehensive Second Edition (Oxford, 1888), revised and enlarged by Dr. W. Hatchett Jackson, D.Sc., F.L.S., is in reality an entirely new work.

inations were thus expressed in a letter to his brother in New Zealand:—

¹ That frequent examinations are an evil to the very best men I admit, but it is only to the very best men, who are a very small class, and all human regulations inconvenience somebody; good men are benefited by being obliged to take stock of their attainments, and put them into easily manageable form and shape; bad men, *φᾶῶλοι* mentally and morally, are saved often from utter ruin by the consciousness that a sword of Damocles is hanging over them, 'Jamjam lapsura cadentique imminet assimilis,' in the shape of a coming examination.

It may be noticed that in his letter (1876) to me as a student, printed on pp. 188-9, Rolleston twice speaks of getting rid of examinations.

Two years later, when I was a demonstrator, he wrote (June 22, 1878) about an examination with which he had been much dissatisfied, and said of the classes of certain candidates:—

It is a regrettable thing for their sakes, and as you have taken a great deal of pains with one or more of them I am very sorry for it on your account also.

There is always a greater or less element of chance in every Examination, and the existence of this lottery-factor is one of the many evils which the absolute necessity of Examination entails and involves.

You must not, however, allow this mischance to discourage you: when we have two Examiners in each Department of the School, such accidents will be less common, though in the very nature of the case they

¹ This and all later words of Rolleston on the examination system are quoted from Professor E. B. Tylor's 'Biographical Sketch' in *Scientific Papers and Addresses by George Rolleston*, edited by Sir William Turner, Oxford, 1884, I, 1-1iii.

will from time to time occur and teach everybody to look to other results besides those of Class Lists.

Still later, Rolleston came to see in an even stronger light the injury wrought by the system, and one of his last occupations was to draw up a Memorandum on the subject.

The system has been accepted, he wrote,

both inside and outside the University as an Institution for imposing Mint Marks and Trade Marks on men who pass through it as First, Second, Third, and Fourth Class men. I believe (with the Scotch University Commissioners) that this function does more harm than good, and I hold that the Universities ought to be content to divide men into two Classes only, those two to be one Class in alphabetical order of Honour-men, and another, also in alphabetical order, of Pass-men.

He was especially impressed by the mistaken conclusions which the system of classing suggests and for a time compels the world to accept. He wrote down the

names of men whose later careers had conspicuously reversed the verdict of the Examiners, including . . . a little list of First-Class men whom the world has not thought much of afterwards.

From Genoa he wrote to his friend Max Müller, on January 13, 1881, enclosing the above-mentioned names. In the letter he said :—

The more I think of it, the surer I am that with our system of gambling and cramming for classes we shall never succeed in making the pursuit of knowledge a real end in the University.

Within a month he wrote again from Bordighera:—

The reform of all others which is the most important [to be dealt with by the University Commission, then sitting] is the reform of the Examination system. It really rules everything almost which Oxford has in the way of activity; by virtue of its gambling element it possesses an attractiveness which no other purer rewards or pursuits can have. I see from my window Monaco with its Prince, its Jesuits and their schools, . . .; and under it the modern Monte Carlo with its modern appliances of all kinds and its gambling Casino, and I feel that this latter place represents the Examination system with its excitement, its gambling, its power to dull aspiration of every better kind, and its all but entire monopoly of the activity of the place, . . .

It would too greatly enlarge the present section to enter on any discussion of Rolleston's views on the Examination system, but a few thoughts on the subject will be found in Chapter X.

I have attempted in the present chapter to record the impressions made by a great and wonderful personality. As I have been writing, the immense power of the gift has been again and again forced upon me. By its distinction is given to every endeavour, and conquest in becoming easy becomes also graceful. But the power is as dangerous as it is great. A man cannot but be himself affected, even if unconsciously affected, by the impression his own individuality makes upon others. To those who possess it, the exercise of the gift is easy and fascinating—is only too likely to become fatally easy and irresistibly fascinating. For the scientific man it is not a gift to be desired except as the devoted servant of a gift

still higher,—the unbounded and unceasing love of knowledge for its own sake.

Rolleston was certainly inspired by the love of knowledge, and it is remarkable that with his extraordinary gifts he did not produce scientific work of a higher kind. The explanation is probably to be found in the character of his education and the intellectual atmosphere of his age. In Oxford and in English-speaking countries generally, the age was receptive rather than creative: knowledge was cultivated rather than the imagination. I am of course speaking of the realm of learning. Elsewhere other conditions held sway. The fire and inspiration of that age lay in the realm of social and political reform, and the most ardent spirits of the University rightly and naturally bore their part in the struggle for liberty. And the movement for greater breadth and freedom was just as necessary within the University as without it. At that time every side of academic life was fettered by the unnatural and cramping conditions that still unhappily exist in the single Faculty of Theology. At that time the conclusions arrived at after patient striving for the truth were not accepted or rejected on their merits, but judged by their bearing on the beliefs of the day.

The inspiring struggle for freedom without and for freedom within naturally tended to make politicians rather than followers of learning. It has been said of Goldwin Smith that he was by his nature more fitted to be a politician than a University professor, and the same may be said of his friend and admirer, Rolleston.

The old order changeth, yielding place to new.

As the heritage in part of a more distant past, in large part too of struggles far back in the last century, we now live in a country where there is probably more real liberty than in any other in the world. And to-day if more liberty be desired there is no lack of champions ready and eager to fight. The follower of learning need not leave his work to assist in the emancipation of his fellow countrymen. The only vital liberty that is now threatened in this country is his own—crowded out as it is and forgotten in the rush of examinations and the diversion of endowment—the cramped and thwarted liberty to yield himself to the love of knowledge.

These thoughts are not out of place in attempting to understand the remarkable man who is the subject of the present chapter. Rolleston's active imagination was fired by the great movements of his time rather than by an educational career which did little to encourage originality. With his wonderful memory and interest as keen as it was broad, the receptive side of his brain was in youth developed to an extraordinary degree. There followed a professional education and training—necessarily receptive—and then a professional career lasting until the end of 1859; and it was not till 1860, when he became Linacre Professor, that he could seriously devote himself to original work. With the single exception of his *Report on Smyrna* (1856) he published nothing until 1861, when he was 32. Without any experience in his younger more impressionable years of the method and the discipline of scientific investigation, he never had the chance of developing a sense wellnigh instinctive which should guide him in

the choice of a scientific problem and in the means of attacking it. And he was probably misled, by the remarkable effect of his own personality, into the belief that his investigations were of the highest importance. They seemed to inspire the keenest interest—such as only the very best work could evoke, but all the time the enthusiasm was for the man himself rather than for his researches. His imagination, fine and active by nature, had never been subdued to the conditions under which every great investigator must strive. Without the criticism to which a more ordinary man would have been subjected, Rolleston flung himself now into this subject, now into that, and the results, when calmly examined, are not so great as they appeared to be under the enchantment of his magnificent presence.

That an intellectual equipment of such extraordinary distinction should have to rest on the fleeting testimony of memory instead of on the enduring testimony of achievement is a mystery hard to solve. It may be best understood, I believe, by looking to the power that lies in time and circumstance to thwart or develop, to make the best of a man or something short of the best. But when the best might be so great anything short of it is a tragedy.

CHAPTER IX

MANY MEMORIES

THIS chapter must be frankly autobiographical. There is no help for it. Having gone so far in acknowledging the kindness and encouragement that I have received, it is impossible to stop, and to speak of it more fully involves a brief account of my life.

It is a fortunate thing for a man when both his parents possess the love and the power of work. More than half a century ago it was no ordinary thing for a woman, simply for the love of the work, to set herself to write a large volume on the history of England.¹ Even the mere mechanical effort, so my father used to say, left a permanent effect upon my mother's handwriting. At the end of the Preface, written shortly before my birth, we find the statement of one chief principle which the book was created to illustrate and to prove,—a principle destined to be revived and rendered classical by the genius of John Richard Green :—

Battles by the sword, the brilliant achievements of arts and arms, and the follies and vices of kings, no more comprise the history of a country, than a description of merely the physical powers of a man gives a just and adequate idea of his entire being.

¹ *A New History of England : Civil, Political, and Ecclesiastical*, by G. S. Poulton ; W. Freeman, London, 1855, demy 8vo, pp. viii + 768.

The love and the power of work were equally conspicuous in my father, both in the strenuous discharge of his professional duties as an architect and in the work he set himself to do after his retirement. Contriving and carrying out his ideas in his garden, or tricycling over the country and making careful drawings of churches, he never, up to the end of his life, was content to be idle. This dominant characteristic is recorded on his grave in the poetic words of the writer of old:—

Man goeth forth unto his work and to his labour
until the evening.

It is probable that the love of science was inherited from my father's family. I sometimes look with wonder on the beautiful preparations for the microscope made with the imperfect appliances of those days by one of my father's brothers.

However loving parents may be, and no parents could be more loving than mine, it is manifestly impossible for them to live in any age but their own. The age of my childhood was very different from that of my children's. The sad result emerges that my very earliest memories of my father and mother ever persistently cling to certain tortures which in those days were considered necessary before parents could be seen at all:—to soap which seemed to have an especial affinity for the eyes and nose, to hair pulled and twisted into shapes quite unnatural to it. I even remember heroic attempts, and sufferings which I fear were not heroically borne, to make the most

obstinately straight of 'all uncurlable things to curl', as Calverley says in a slightly different form.

As a small boy I went to two boarding schools. The memories that remain are of punishments only,—punishments, and the broad principle that every natural inclination was wrong and dangerous, that you must not drink when thirsty, or bathe in the cool water when hot, and other such cheerful precepts for the young. It is to be feared that, endowed with a full share of natural promptings, I did not take kindly to the teaching. I have indeed been told of a child, and seem to have a hazy recollection of the incident myself, who, when given less sugar than he thought to be right,—and surely no one else could know so well what he really needed,—remarked with emphasis, 'You're a naughty girl, mamma!' The Parthian shot discharged at the inconsiderately astonished guests of both sexes, as he disappeared beneath the table, was even less appropriate,—'You're *all* naughty girls!'

A few months before my tenth birthday I was sent, in the autumn of 1865, to my third school—that of Mr. Watson, at Reading, mentioned on pp. 21-2. Here I remained for seven years as a boarder. The one great feature that stands out, in what I must admit to have been a long dreary interval in a happy life, arose from the joyful hours spent on Sundays with my father, mother and two sisters.

My parents did not send me to a public school, because they were possessed with the idea that public schools were bad and dangerous places. I infer from conversations which I was supposed not to under-

stand, that *Tom Brown's School Days* was meat too strong for many parents of that day. The dread of evils openly admitted and openly fought was deeper than the fear of evils supposed to be non-existent because they were not heard of.

Mr. Watson, a very clever, interesting man, formerly a tutor at University College, London, had one failing which rendered him quite unsuited for the position of head master. He was a poor judge of character. It was therefore a matter of chance whether the under-master, of whom the boys saw far more than they did of the head, happened to be a good teacher interested in his work, or a man who was supposed to be able to teach because he could not find anything else to do, or even one who ought to have been maintained at the expense of the State and thus prevented from having anything to do with the profession of teaching. However, being interested in science of all kinds, and left very much alone in this section of my work, it is probable that the puzzling out of difficulties in books and in the little laboratory was a valuable discipline, and that I learned much from it.

Towards the end of the seven years at this school a classical Demy of Magdalen came over once or twice a week and taught us,—a pleasant relief after some of our experiences in resident under-masters. Fortunately for the boys, the experiment was so successful that it was repeated, and another Demy came when the first could do so no longer. He was also successful, and was in turn succeeded by a third, a charming man named J. N. Gordon (Demy 1868-72), who became

a resident master. He saw my interest in science, and told me of the Science Demyships at his College. By his advice, in the autumn of 1872, during my last term at school, I went up for the examination. Although unsuccessful, I learnt a great deal about the proper books to read and the conditions of the examination. My mother and I took rooms in High Street and greatly enjoyed our few days at Oxford.

I left school at Christmas, 1872, and began work in my father's office. He had been successful in his profession, and was naturally anxious that his only son should reap the benefit of his work. My mother, on the other hand, always longed for me to go to Oxford. In Reading of the Seventies, and doubtless in many another English town, Oxford was regarded as a deadly dangerous place, where the aristocracy and their companions led wild lives and accumulated vast debts. My mother knew that this picture was at any rate incomplete; for her eldest brother, whose memory she worshipped, and after whom she had named her son, had been at Oxford.¹

My father was pleased with my drawing, and I owe a great deal to the experience in his office and upon buildings in course of erection from his designs. But my heart was in science, especially in Zoology, and late at night in my bedroom I used to read the books of which I had heard at the Magdalen examination.

¹ 'Edward Bagnall, I. S. [Eldest son of] Edward [Bagnall], of Darlaston, co. Stafford, gent. Magdalen Hall, matric. 15 April, 1825, aged 16, B.A. 1829, M.A. 1831.' *Alumni Oxonienses, 1715-1886*, Joseph Foster, London, 1887-8.

By accident my parents came to know of these studies, and then my father yielded to my mother's wish and mine, and said that I might go to Oxford if I could gain a scholarship. And at the same time he gave me every opportunity of preparing for the examination to be held in the following autumn. My elder sister was quite as delighted as my mother and I at the change in my prospects.

Thus it came about that in the Summer Term and part of the Long Vacation of 1873 I went over by train to Oxford three times a week and worked in the University Museum and with a tutor. I attended Rolleston's lectures and at once felt the irresistible grip of his individuality. He burst in upon my life as something stupendous and magnificent, transcending all that I had imagined of human power and human performance. The shock of such a glorious surprise at the outset of life is altogether stimulating and inspiring. It is the deepest debt I owe to Rolleston's memory. The impression produced on me, the rapt attention paid to every word, awoke an answering interest in him; for the examiner told me that Rolleston asked how I had done in the scholarship examination, and was anxious for my success.

The effect of Rolleston's lectures upon the beginner has been described on p. 191; and it was only natural that when I attempted to write a connected account of some subject with which he had dealt, the result was very indifferent.

Fortunately, however, I was reading at the time with Dr. Seymour J. Sharkey, and soon found that my tutor was especially critical when the answers were written

from lecture-notes. Dr. Sharkey taught me, at precisely the right moment in my life, the importance of a well-arranged and well-balanced statement.

During the whole period of preparation for a scholarship my knowledge of Oxford was limited to the Museum and the Parks, where I used to eat my lunch. The October examination for Science Scholarships, in which Magdalen, Merton, and Jesus Colleges combined, was held at Magdalen. Waiting in the Summer Common Room for some formality connected with the examination, looking at the well-bound volumes on Natural History on the shelves, and the wide lovely space that stretched below the windows, there suddenly came over me the longing for Oxford, for work such as I loved to be carried on in a scene of great traditions and historic beauty—the feeling, vague and ill-defined, that all this had come down through the centuries as a great gift offered to each passing generation, and in that day to my generation and to me.

The opinion has been sometimes expressed that it was an unfortunate choice that gave to the scientific departments of Oxford a fine and noble site, involving heavy expenditure in the style of the buildings erected upon it. The view is, as it seems to me, superficial, and the policy it represents a mistaken one. Our oldest University needs the fresh inspiration of the dominant spirit of the age, which is, after all, a part of the ancient brotherhood of learning,—a part, too, with high Oxford traditions. And the scientific student needs and feels as fully as any other all that Oxford can teach him of

beauty and historic association. That insistent message of Oxford, which Matthew Arnold described in a splendid well-known passage as the victorious rival of the message of science, breathes no spirit of rivalry but a glorious welcome :—

. . . steeped in sentiment as she lies, spreading her gardens to the moonlight, and whispering from her towers the last enchantments of the Middle Age, who will deny that Oxford, by her ineffable charm, keeps ever calling us near to the true goal of all of us, to the ideal, to perfection,—to beauty, in a word, which is only truth seen from another side ? . . .

One secret of the charm of Oxford and Cambridge has not I think been sufficiently recognized. It springs from the fact that nearly the whole of the students were born elsewhere, and first enter these Universities when they have reached the responsive age. Then it is that the student suddenly ‘breathes a novel world’, full of unimagined beauty and interest. He is thus far more deeply influenced than would have been possible had he been born to such historic surroundings and so come to take them for granted. It has been explained that my school life was not particularly happy ; but I am sometimes glad of it, for thus Oxford has been even more to me than to many others, my debt deeper, my love I hope greater.

Returning, after this digression, to the examination in October 1873, I was awarded the scholarship at Jesus College and at once came into residence and was allotted rooms in the beautiful inner quadrangle. Here I lived in the most complete comfort and happiness until

some time after I had taken my degree. Two years and a Term were occupied—rather leisurely, it must be admitted—in passing the non-scientific examinations then required of the science man, as well as the Preliminary Scientific Examinations. In January 1876 I began to prepare for the Honours Examination in Zoology and again came under Rolleston. Some incidents of this year's work have been described on pages 187-9, and the memories on pages 194-200 have been recalled from Rolleston's lectures in the same period.

As soon as I had taken my degree Rolleston offered me the Junior Demonstratorship, a post which I held in 1877, 1878, and two Terms of 1879. He was then suffering from the first attacks of the terrible renal disease that was to carry him off in all the splendid vigour of mature manhood. He was only fifty-two when he died. Its effects made him excessively irritable and increasingly difficult to work with. Furthermore, the relationship of Professor and student is very different from that of Professor and paid Demonstrator. Rolleston, as I knew him, was kindness itself in the first of these relationships. In the second he was sometimes hard and unsympathetic.

The inducements offered to a Junior Demonstrator in those days were small. The stipend was slender (£15. 0. 0. a Term and one-third of the fees, amounting usually to about another £15. 0. 0.), and no original work might be done between 10 and 1, and 2 and 5—the times at which he was required to teach. Even on Saturdays there was no departure from these rather severe hours, so that the position was trying to one accustomed to afternoon exercise on the generous Oxford scale. Rolleston

himself had not much sympathy with these longings of a young man who had only just ended the free life of an undergraduate. In the Long Vacation of 1878 I went with my friends F. W. Andrewes of Christ Church and his brother a delightful expedition by river from Reading to Lechlade and back. We camped for a day or two at Godstowe, and I walked in to see Rolleston about some piece of work for his Department. I saw that he was looking at my camp costume with a curious and not very sympathetic expression—the badge of the long since deceased Dark Blue Bicycle Club seemed especially to catch his eye—and, when I had gone, he said to the Senior Demonstrator ‘Did *you* ever go camping-out, Jackson?’ The deep tone and sardonic expression revealed his profound conviction that no reasonable being could give an affirmative answer to such a question. Rolleston had been a rowing man himself and retained a kindly sympathy with rowing,¹ but camping on the river in the Long Vacation was evidently, in his opinion, outside the pale.

I have already said that no original work was possible for a Demonstrator during Term. Rolleston certainly wished me to pursue research in his Department, and spoke of it more than once, but the conditions he imposed made it impossible. Furthermore, he never suggested any piece of work upon which I might make a first attempt. I was not attracted by his subjects and he did not try to induce me to begin work in any of them. Hence, not yet started on work of my own, I

¹ *Scientific Papers and Addresses, by George Rolleston* (Biographical Sketch), Oxford, 1884, I. xiii.

began in the Long Vacation of 1877 to follow the methods and repeat the investigations described in Foster and Balfour's *Elements of Embryology* (Pt. I), which had appeared in 1874. The microscopic preparations of the developing chick which I made at my home in Reading so pleased Rolleston that, in the Summer Term of 1878 and in all subsequent Terms, he arranged a special class in the subject for me to teach—a class which was continued by my successor, A. P. Thomas. Yet during the whole period—the eight Terms from Jan. 1877 to June 1879—of my Demonstratorship under Rolleston, I felt a growing desire, which soon became a fixed determination, to bear a part in that labour of love which Science offers to all her votaries.

The number of the students had sunk to a low level in the Summer Term of 1879, but it was the want of time for my own work, rather than the reduction of the stipend, that induced me to resign the Demonstratorship. I remained in Oxford, working at Geological subjects and taking private pupils in Zoology. Rolleston's over-excitability, the result of the sad state of his health, made the position of an independent teacher of his subject a rather trying one. More than once he imagined that opposition was being threatened, but he always freely accepted the assurance that nothing of the kind was intended. I was not in a position to oppose him even if I had so desired; and I was far from desiring it. In spite of somewhat volcanic conditions I look back with pleasure on my relationship with him during the last four Terms of his life in Oxford, from October 1879 to December 1880.

After the close of my first Term as an independent teacher he wrote, December 28, 1879, the following extremely kind and generous words:—

I intended to write to you some weeks ago to say that I had observed the results of your teaching in the Oriel men who came in for my [Terminal] Examination as also unless I am considerably mistaken in the case of Mr. — [naming a private pupil of mine] who would I think scarcely have been placed as high as he was but for your assistance. If I have the opportunity, as I think it is not unlikely I may have, of urging this on your behalf, I shall not omit to do so.

It is now necessary to return to January 1877, when I began to work for the Burdett-Coutts Scholarship in Geology and the allied sciences. Rolleston was opposed to this course, but at once yielded when informed that the Scholarship was really needed. He was also extremely kind in granting facilities for attending lectures and doing practical work in Geology. The decision to compete was most fortunate, for it meant four Terms' close relationship with Joseph Prestwich, the Professor of Geology.

It would be impossible to find a sharper contrast: Prestwich, with his gentle, dove-like face, and painfully timid, hesitating address; Rolleston, with his magnificent presence and air as of a man of destiny, born 'to ride the whirlwind and direct the storm'. But Prestwich was a great investigator whose name will live in the history of Geological science; and when, in 1879, a new ambition was added to the old desire, I was naturally drawn towards Geology and into the part of it which Prestwich had done so much to adorn. On October 6

of that year, the Professor, with great kindness, came from London to help an inexperienced student with his first piece of work—the description of an interesting section of river gravels on the Redlands Estate at Reading.

The Valley of the Thames has been worn away to a depth of thirty-six feet since the time when the deposit was formed, and a study of the gravel and sand enabled us to recall something of the past of the ancient river. There, embedded in the sand, lay the trunks of the Scotch Fir (*Pinus sylvestris*) that had rolled down the stream, and there too the molar teeth of the Mammoth or hairy elephant (*E. primigenius*) and the bones of the Rhinoceros that had wandered along the banks.

The Professor was not my only companion on that geological excursion, nor was science the only subject of conversation. Yet science was always there in the background; and it was inspiration for a life-time of science that was craved and granted.

Years later, when the Professor's wife was told the story of that day, she said 'Who would have taken him for a match-maker?' And certainly no match-maker could have been more innocent.

Under these happy auspices, with Prestwich for guide, and all around us the records of an ancient past with their irresistible appeal, a little scientific paper was begun—brief and unimportant, but for the writer the most valuable of all; for it was his first.

The central crisis of life—holding in store a happiness infinitely greater than all the promise, nay the assured certainty, of boundless hopes—had fallen on

the day of another crisis, that of intellectual development. I write no more, because nothing that I could write would be sufficient of the greater crisis; but only this—that in the tumultuous companionship of surging thoughts all else was accounted nothing. Banished from the crowded solitudes of that day and of many glad to-morrows, the step then taken was still to determine the direction of future intellectual growth.

The paper on the Redlands gravels was followed in 1881 by the investigation of a charming Yorkshire cave, the outcome of a visit in 1879 to the dear friend to whom this book is inscribed. I was married a few months before the digging and sifting were begun, and Joseph Pengelly, the great pioneer of cavern exploration, used always to say that we spent our honeymoon in a cave!

Although this geological work gave me the keenest pleasure, I had the feeling all the time that I should sooner or later come back to Zoology.

In 1881 the dread disease finished its work and the mighty personality of Rolleston became a memory. His pupil and successor, Henry Nottidge Moseley, was a man of an entirely different type. He had not Rolleston's commanding presence and speech, but both as investigator and teacher he was unsurpassed and unsurpassable. He had a marvellous power of insight, and some of his greatest discoveries were made by grappling with problems that were open to the world. I will only give one example, but it is characteristic.

Every one who takes the slightest interest in sea-beasts knows the strange mollusc Chiton, with its jointed shell of many plates. Moseley, while he was Linacre Professor at Oxford, found that the outside of this flexible armour, which everybody had looked at, was covered with eyes which nobody had seen!

Various small points had attracted my attention when I was working in Rolleston's Department or at home in vacations. I remember especially making sections of the salivary glands of a mad dog, observing a complex form of gland in the stomach of the little fish known as the Miller's Thumb, and the large distinct elements in the retina of the Pike. Each of these had suggested a possible line of work; but the subject that chiefly took possession of me was the idea of re-investigating the terminations of the nerves of taste in the papillae of the tongue. The idea was suggested by noticing the large size of the circumvallate papillae on the tongue of the ox, and I began to prepare some material for microscopic examination.

No serious work had been done by me in any of the above-mentioned subjects at the time when Moseley was made Linacre Professor. One evening, when Professor and Mrs. Moseley were dining with us in the Summer Term of 1882—the first Term of his residence as a Professor—I casually spoke of the last of the above-mentioned points. 'Oh,' he said at once, 'if you're thinking of working on the tongue I had better hand over to you the material I prepared on the *Challenger*. There is a tongue of the *Ornithorhynchus* and tongues of Marsupials with undescribed lateral taste organs.'

That little conversation with Moseley and its sequel, the gift of the material a day or two later, did more for me than all the Terms I had been with Rolleston.

The start is the difficulty. After that, fresh paths lead off in every direction, bewildering in their number and in the variety of their rival fascinations. And so it was with the work begun on the tongues of the lower Mammalia. Before leaving it I wish to speak of a piece of work in which I was treated with remarkable generosity and a kindness never to be forgotten by the late Dr. W. Kitchin Parker.

From my student days I had been familiar with the work of this great man and had always been charmed and fascinated by his boundless enthusiasm and the play of his fancy over a subject which to many would seem to be uninviting and necessarily technical. I still remember sentences read in his works thirty-five years ago. As an example of the dry bones which were made to live under the spell of his enthusiasm, I select the following epitome of the development of the fowl's skull. He here tells of forms lower and lower in the scale which flashed vision-like before him as he worked his way downwards through earlier and earlier stages of development,—

from that of the old bird . . . to that of the chick of the fourth day of incubation.

Whilst at work I seemed to myself to have been endeavouring to decipher a *palimpsest*, and one not erased and written upon again just once, but five or six times over.

Having erased, as it were, the characters of the culminating type—those of the gaudy Indian bird—

I seemed to be amongst the sombre Grouse ; and then, towards incubation, the characters of the Sand-grouse and Hemipod stood out before me. Rubbing these away, in my downward work the form of the Tinamou looked me in the face ; then the aberrant Ostrich seemed to be described in large archaic characters ; a little while, and these faded to what could just be read off as pertaining to the Sea-turtle ; whilst underlying the whole, the Fish in its simplest Myxinoid form could be traced in morphological hieroglyphics.¹

The following charming passage was published less than a year after my Final Examination :—

The little mass of protoplasm and food-material in the egg or the womb is by unseen power, noiselessly, unceasingly, unhastily driven onwards in a growth and differentiation which not merely show us how the individual is built up, but in addition link it with its fellow-creatures. The embryo is not for the sake of the individual only: it expresses a condensed history, a manifest relationship ; it is for the sake of those who can study and learn about nature.²

I must now give a brief account of the circumstances which led to delightful and, for me, memorable association with one who from youth onwards had been among my great heroes.

The tongue of the *Ornithorhynchus* given to me by Moseley led on to other inquiries into the structure of this extraordinary animal, finally to the hair. Its structure and arrangement were found to be very complex and to suggest a certain resemblance to the

¹ From *Memoir on the Fowl*, 1868, p. 803.

² *Morphology of the Skull*, Parker and Bettany, London, 1877, p. 358.

scaly covering of reptiles. I was extremely anxious to test my conclusions by studying the hair of a young animal, and hearing that Dr. W. K. Parker possessed such a specimen, I wrote in January 1888 and asked if I might examine it. He immediately invited me to come and see him, showed the whole of his material, and lent me a series of sections of the head prepared for him by his son, Professor W. Newton Parker of Cardiff.

At this point it is necessary to explain that teeth are among the most ancestral structures possessed by Mammals. They resemble the scales of the shark in structure and development; and in the shark itself the scales of the skin are continued into the mouth as teeth. There can be little doubt that the ancestor of Reptiles, Birds, and Mammals retained the scale-teeth with but little modification, although the skin became covered with very different structures. But in Mammals there is a remarkable break in the chain of history. The very lowest of them, *Ornithorhynchus* and *Echidna*, with many Reptilian affinities—laying eggs like a lizard, and lizard-like in their low temperature and in parts of the skeleton—the nearest living representatives of the ancestral form through which all higher Mammals received their teeth, these low Australian forms are in the mature state either utterly toothless or crush their food with horny plates. It would not be surprising if these ancestral structures had been lost in the higher more specialized Mammals, as they have been lost in all living birds: but it is surprising that they should be wanting precisely where we should expect to find them.

I brought the sections to Oxford, and on the following day, as I was arranging the microscope, the problem sketched in the last paragraph flashed across my mind, and the question presented itself,—‘Does the *young* Ornithorhynchus possess true teeth?’ I looked at the sections, and there was the answer as clear as day. There, lying beneath the gum, in the position of the horny crushing-plates of the adult, were several true teeth, many-rooted and most complicated in form. It was shown later on, by the examination of an older but still young specimen in the Museum of the Royal College of Surgeons, and one a little older still in the Natural History Museum, that these true teeth cut the gum, are used for a time, but are soon lost and their sockets invaded by the gum, which thickens and hardens into the well-known horny plates.

Dr. Parker had been extremely generous in lending his rare and valuable material in order to enable me to study the young hairs. I had not borrowed the sections to look for the teeth, and, as already explained, the possibility that teeth might be found in them did not occur to me until later. There would not have been the slightest reason for complaint if Dr. Parker had replied to my letter telling him of the discovery, that I had gone beyond the conditions under which the material was lent, and that I was not at liberty to publish observations on any structure except the hairs. It would have been perfectly reasonable and just to maintain that the publication of my discovery would merely mean that the inevitable results of his own extended researches would be unfairly forestalled.

So far from taking this course, Dr. Parker, when I wrote placing myself in his hands, sent the following extraordinarily generous answer:—

Crowland
Trinity Road
Upper Tooting, S.W.

Jan. 20, 1888.

DEAR MR. POULTON,

You can't have been more pleased with your visit than I was, nor more delighted with your DISCOVERY than I am.

I am sending registered a bottle with the *right ramus* of one of the two baby Platypi—they were both of the same size—, it is in two pieces, and only *partially* dissected. Kindly let me know when you get it, and if it is what you want KEEP IT. I've got the *left*, complete.

What I want you to do is this—Don't go and quietly pop it into Mr. Anybody's Journal; but bring the whole paper before the R. S., it will be a kindness to me, you [will] find that I'm an *useful tattler* and I want to have an opportunity of letting loose mine opinions about Monotremes, Marsupials, and Placentals at THE SOCIETY. Schäfer may *Father* it. I'll *Mother* the Paper, and dandle it before the 'Swells'.

It's 'awfully fine'. Why, now we can see how those blessed 1100 existing birds have got no teeth but only *hard gums*, and you'll see with half an eye that the *Platypus* had a 'close shave' not to be a sort of *abortive bird*.

You may just mention that the *beasts* and *sections* were *mine*, and that W. N. P. made the sections. That brings us two into 'honourable mention' along with yourself in the 'blaze of glory' that will of necessity break forth when the fact is published.

I'm dreadfully sorry to hear that Huxley is ill again, with the same complaint, viz. *Pleurisy*. No one would

have been more ready to dance for the joy of such a fact as you have got hold of.

Yours most truly,
W. K. PARKER.

E. B. Poulton, Esq., M.A.

A few days later, on January 24, he wrote :—

I'll send off this to you at once, hoping you'll get it, at least, by noon to-morrow. I've read your letter twice over : it gives me new youth : this is a delightful episode in my special work.

Then, after suggesting that I should work on the allied *Echidna*, and offering me material, the letter continued :—

I'll say no more but tell you to use your own wit and wisdom and it will be a fine piece of research, a thing to make glad the heart of every genuine Biologist.

It was a splendid encouragement to be treated with such noble generosity by a veteran of science,—by one whose works I had studied with admiration and delight. I was doubly happy in meeting so kind a friend thus early in my scientific career ; for although at the time I was almost exactly thirty-two, I had not, for reasons already explained, undertaken much scientific work. Dr. Kitchin Parker, whom I shall always remember with affection and gratitude, was born on June 23, 1823, and was thus a few months over twice my age.

Although the work on the lowest Mammals, continued intermittently from 1882 to 1894, gave me the greatest pleasure and interest, I felt from the first that sooner or later the passionate enthusiasm of childhood would again spring into life. One of my earliest and clearest

memories is the sight of a Peacock butterfly resting with expanded wings on the edge of a saucer of water on the lawn of my father's house at Reading. Then years later, when the maturity of eight was reached, there was trouble at a school at Worthing when a small boy insisted upon catching butterflies, and thought he had hit on quite a clever idea when he brought them home in his purse! At my next school (see pp. 223-5), when I was probably about fifteen, I remember defending the pursuit of entomology against all comers, including the under-master, who replied 'Can you tell me how it will put a leg of mutton on your table?' Then, when working for a scholarship in 1873, I allowed myself the luxury of an hour once or twice a week with Professor Westwood and the Hope Collections and Library. The most illustrious entomologist of his day was extremely kind to me, and these hours, always taken at the end of a hard day's work in Rolleston's Department, were a delightful treat.

My youth was full of happy memories of the companionship of my younger sister in collecting insects, breeding insects, and watching the ways of insects; but I did not at first see the path to investigations on insects; for the science of systematics (classification and the description of new species, genera, &c.), in which Professor Westwood was so distinguished, did not greatly attract me.

The first stimulus to work at insects was received from A. R. Wallace's *Essays on Natural Selection* (London, 1875). My copy is dated 1878, and I certainly read the book, with the most intense interest, in that year.

Thus was aroused a life-long delight in the facts and theories of Protective Resemblance, Warning Colours, and Mimicry.

The direct incentive to investigation came in 1883 as the result of reading Professor August Weismann's *Studies in the Theory of Descent*, translated, with editorial notes by Professor Raphael Meldola (London, 1882). I was especially interested to find, in these notes, a statement that the shade of green of the Eyed Hawk caterpillar varied according to the colour of the leaves on which it fed. The account of this 'Phytophagic' colour-variation was especially stimulating, because it recalled the observations I had made as a boy upon this very caterpillar. I began to work at once, and was soon able to prove that the effect is produced by the coloured environment provided by the plant and not by its influence as a food; that it is Phytoscopic rather than Phytophagic. Once begun as a direct result of Meldola's editorial note, the inquiry widened into many laborious experiments on numbers of species of larvae and several pupae. Another of the editorial notes led me to undertake the spectroscopic examination of many larvae and pupae, and finally to obtain direct proof that a modified chlorophyll derived from the food-plant may be employed to give colour to the blood or skin. Professor Weismann's investigations into the evolution of the markings of caterpillars also led to much work along the same lines.

I was thus started in what was to be the work of my life. The relationship between older and younger workers in the same line is not invariably cordial, but

I have received nothing but help, encouragement, and sympathy from the very outset, when I needed it most,—from Meldola, whose friendship began with the reading on November 7, 1883, of my first paper on the subject; from Weismann who wrote to Moseley about the same paper; from Moseley who sent me the letter knowing that it would be an encouragement; from Lankester who wrote to me and used the kindest and most inspiring words; from Wallace whose friendship, like that of Meldola, sprang from this immature beginning of work.

I have now given a brief account of the kind help and encouragement which started me in various lines of work. And the same kindness has always accompanied me in later investigations. I have the happiest memories of comradeship not only with my many Zoological friends but also with Physicists and Chemists. I am unwilling to single out particular names, but cannot forbear to speak of the delightful hours I have spent with the late Professor G. F. Fitzgerald and with Professor C. V. Boys, and of work on the chemistry of insect secretions with Dr. A. G. Vernon Harcourt and Professor R. Meldola.

The remaining pages of the present chapter record a few recollections of John Ruskin and Oliver Wendell Holmes.

It may be of some interest to record my impressions of Ruskin's celebrated experiment in road-making. Describing, so it was said, the highest embodiment of

Oxford's premier exercise as 'eight fools on a toothpick', Ruskin pleaded for the dignity and the delight of useful labour. This was a cause that always appealed to me, and in the autumn of 1874 I went to take a part in the work.

The disciples were directed in their exertions by Ruskin's gardener, a man as round and fat as his master was tall and spare—'the sort of man who walks about with a big belly and a pot-hat,' to quote an ingenious description I once heard of the typical gardener-foreman. But David Downs, who was a capital worker himself as well as an excellent foreman, only possessed the first-named qualification. A plate in Mr. Taunt's recently published work¹—a valuable record of the Diggings—clearly shows that he wore a soft felt hat. Ruskin himself was there, with his fly-away blue tie, and looking like a dark pillar in his black frock-coat. He asked for a hammer and proceeded to attack a stone of moderate size. After several fruitless attempts the gardener wanted to come to his aid, but Ruskin refused. 'I think I can manage it,' he said, and he did. Wherever the oolite of Oxford is used for road-making the mud of winter and dust of summer testify that its power of resistance is far from stubborn. Many of the disciples too were anything but muscular. Some of my friends who walked out to see the Hinksey Diggings described the numbers of athletic men, followers of all kinds of sports, who were sitting smoking

¹ *Matthew Arnold's 'Scholar-Gipsy' and 'Thyrsis', and the Country they illustrate*, by H. W. Taunt, Oxford, undated. The plate referred to faces p. 86.

in the shade of the hedge¹ watching the efforts of men who were, by comparison, but puny and feeble specimens of their race.

I never worked at the Ruskin Road after that single afternoon's experience. The motive itself appealed to me, but not its application. A great cause is worthy of great uses, and this is precisely where Ruskin failed, and failed in the most surprising manner. He of all men would be deemed most certain to select a task which should really lead to increased usefulness and at the same time to added beauty. The main piece of work, requiring most of the efforts of the men, was utterly useless, with ugliness in place of a quiet beauty for its only outcome. This will be realized by glancing at the accompanying plate, which I owe to the kindness of Mr. Taunt. It is a reproduction of the plate facing p. 88 of his book, and represents the road in course of construction as seen from the south-east. The tree to the left of the picture has now disappeared. The chief labour consisted in cutting down and removing the earth of a grassy slope, on the top of which the pathway runs under the hedge on the left of the picture. The road was thus made straight instead of curving round the slope in the manner shown by the ruts in the foreground and to the right of the plate. The present steep slope is certainly uglier than the old gentle one, the straight road than the curved one. A straight road, if it led anywhere, would be more useful for traffic, but

¹ A little group, perhaps of such men, perhaps of road-makers resting after their toil, is to be seen by the stile in the distance, on the plate mentioned on p. 245.



The making of the Ruskin Road at North Hinksey. Summer of 1874.

this road comes to an end in the fields a few hundred yards to the south-east. The road was as bad as any in the country before the Hinksey Diggings began and it still remains as bad as ever.¹ If Ruskin had carried out his intention of draining the existing road and beautifying the cottage entrances, the work would have been a great improvement to the south-east end of the village, but as it was, a more ambitious and quite useless piece of work was allowed to absorb the energies of the men.

I regularly attended Ruskin's lectures in the theatre at the University Museum, and greatly enjoyed them. The most amusing and astonishing episode in all the courses was one that has been remarked upon more than once,—the criticism of Mendelssohn. It came into one of the 'Studies in the Discourses of Sir Joshua Reynolds' in the Michaelmas Term of 1875. I quote the passage from the *Library Edition* (xxii. 497):—

Well, you have had another delightful artist lately,

¹ An opposite conclusion is suggested by comparing the two small prints on p. 86 of Mr. Taunt's book. There is, however, an error in the description of the upper of these,—'The Roadway before the digging begun.' This print was made from a photograph taken at the same time as the plate in the present volume, and with a little care, the figures of the Ruskin diggers can be made out in it, while the bank is seen to be cut down along the same line and to the same extent.

The view in the small print represents a far more distant view than that seen in the plate, and the ruts in the foreground were never the scene of Ruskin's operations, for they lie entirely beyond the extreme south-east end of the diggings. I have carefully compared the small print and the plate upon the spot, and it is not difficult to determine the position from which each of the photographs was taken.

much smaller [than Reynolds] but a true artist, a man with the heart of a lark—Mendelssohn. The sweetest, most animated, most trillingly musical of living creatures—a perpetual warble; he warbles and trills his way through Italy, sees no more in Italy than a migrating butterfly might, understands no more. Everything is delicious to him—churches and costumes, and conversation and pictures, and music and sentiment. And how beautiful Religion is, for a thing to pipe and fiddle about! And how grand St. Paul is, for majestic recitative! and Elijah—what themes of picturesqueness, what pathos, and choral majesty of priests of Baal! and the Psalms—what endless topics in them for musical contrast! He takes up, for instance, the 55th Psalm—quite one of your favourite anthems here in Oxford. Yes, thinks the little man—who never in his life had the least notion of remaining in the wilderness; who never was oppressed by the wicked, but petted by the pretty; who never heard the voice of an enemy, but of innumerable friends—how sweetly pensive may all this be in music.

‘Give ear to my prayer,’ in softest bass. ‘I mourn in my complaint and make a noise’—a most sweet noise it shall be; and after everybody has been moved to the most delicious melancholy, then—what a lovely psalm it is—to bring in something deliciously lively, ‘Wings of a dove’—all love letters and dew of course; now we turn on all the trebles, and away we go.

The passage was delivered with the keenest sense of humour, and with restraint, until the end, when at ‘Oh! for the wings of a dove’ the lecturer suddenly became wildly excited and was of course unable to keep to the words of his manuscript as he danced about and violently waved his arms, the long sleeves of his M.A. gown jerking up and down in the most extraordinary manner.

The Dean of Durham has thus described a scene which no one who was present can have forgotten :—

In the decorous atmosphere of a University lecture-room the strangest things befell ; for example, in a splendid passage on the Psalms of David he was reminded of an anthem by Mendelssohn, lately rendered in one of the College chapels, in which the solemn dignity of the Psalms was lowered by the frivolous prettiness of the music. It was, ' Oh ! for the wings ' etc., that he had heard with disgust, and he suddenly began to dance and recite, with the strangest flappings of his M.A. gown, and the oddest look on his excited face. The Oxford musicians were furious, though indeed his criticism was just enough.¹

I have spoken on p. 116 n. 2 of the lecture, on the least and lowest forms of life, delivered by Dr. Dallinger, F.R.S., before the Ashmolean Society, on May 21, 1883. Ruskin was brought to the lecture by Dr. (afterwards Sir Henry) Acland, and had to listen while Dallinger described his beloved organisms ' darting across the stage of the microscope with all the grace and rapidity of a swallow's flight '. I heard Ruskin, as we came out, protesting against the comparison. I was Secretary of the Society at the time, and the following morning met Ruskin and the lecturer at breakfast at Dr. Acland's house. Ruskin said :—

I could not help thinking at prayers, Dr. Acland, that, after last night's lecture, the words you were reading ought to be—' The works of the Lord are *little*, sought out of them that have *pain* therein '.

¹ *Ruskin in Oxford and Other Studies*, by G. W. Kitchin, p. 41. Quoted in the *Library Edition of Ruskin's Works*, xxii, p. xli.

'No': said Dallinger at once, 'sought out *on behalf of them* that have pain therein.' Ruskin made no reply; but the idea of microscopic life and microscopic structure had evidently irritated him. He did not forget it, and he was referring to one of Dallinger's lantern-slides when he said, in a lecture delivered about six months later:—

but only last Term we saw the whole Ashmolean Society held in a trance of rapture by the inexplicable decoration of the posteriors of a flea.¹

The 'decoration' here referred to is an organ, evidently sensory, on the ninth dorsal plate (or tergite) of the flea. Dallinger had used it as an example of the delicate finish possessed by a sculpture which can only be seen with the microscope. With the same object he had shown a sharp and polished needle magnified until it looked like a battered barge-pole, and then compared with it the exquisite finish retained by insects' stings and hairs magnified to an equal extent.

Ruskin's objection to the microscope was then many years old; for in the first lecture of his course on Land-

¹ *The Works of Ruskin*, Library Edition, xxxiii. 354, Lond., 1908. The lecture, No. V of the series on the Art of England, was called 'The Fireside. John Leech and John Tenniel', and delivered Nov. 7 and 10, 1883. The above sentence coming towards the beginning was evidently spoken on Nov. 7. The Society referred to by Ruskin was the old 'Ashmolean Society' which later on became dormant, but later again revived and fused with another active young society to form the existing 'Ashmolean Natural History Society of Oxfordshire'. The editors of this splendid edition of Ruskin convey the mistaken impression that Ruskin was referring to this latter conjoint society.

scape Painting (see p. 88), delivered November 6, 1877, he had laid down as one of his fundamental principles:—

That the food of Art is ocular and passionate study of Nature—ocular, especially as opposed to microscopic.¹

Another reminiscence of Ruskin is connected with the Oxford Local Examinations. The Delegacy had been inquiring into various possible causes of the then increasing popularity of the Cambridge Examination. Among other suggested reasons was the size and the decorative border of the Cambridge Certificate as compared with the plain business-like diploma awarded by Oxford. Here was a question that fell into the province of the Slade Professor, and his advice was sought. It was given in few words and straight. I quote them from memory without fear of serious inaccuracy:—

The Oxford Certificate is all right: the Cambridge Certificate is like a hairdresser's advertisement!

I have no fear of offending my Cambridge friends by telling this story; for, before many years had passed, Oxford, paying her sister the homage of imitation, had herself adopted a certificate with a decorative border!

I conclude with memories of a delightful birthday treat on Jan. 27, 1894, when I was staying in Boston to deliver a course of 'Lowell Lectures'. On that day I dined at 2.45 p.m. with the 'Saturday Club', which met as of old in the Parker House, School Street.

I was present as the only guest, on the invitation of

¹ *Library Edition*, xxii. 508.

Professor Goodwin, although Professor William James had also kindly invited me a little later. About fifteen members were present. Dr. Oliver Wendell Holmes sat at the head of the table with Professor William James on his right, next to whom was Professor Alexander Agassiz. Professor Goodwin sat on Dr. Holmes's left. Judge Field and General Walker of the Massachusetts Technical Institute, were also present. I sat next to my host, whose kind intention it was to talk with Dr. Holmes until his voice had become strong enough, and then to change places so that I might have the opportunity of hearing him. But his voice was such that we did not require to wait, and Professor Goodwin and I changed places at once, and I remained next to Dr. Holmes during the entire meeting. His voice remained strong to the end, although we sat and talked through the whole afternoon. This was a most pleasant surprise, for when I met him the day before at Mrs. Louise Chandler Moulton's, he had a very bad cough and could hardly speak at all. He told me that on going home he had been cured by drinking warm lemonade.

At the beginning of dinner Dr. Holmes followed his usual custom at the Club—so Professor Goodwin told me—and ordered a bottle of champagne, which he insisted on sharing with those around him. He very courteously drank the health of the guest beside him.

Professor James and Professor Agassiz discussed the hereditary transmission of acquired characters, and upon this subject Dr. Holmes alluded to circumcision, and the lack of evidence that there is any transmission

of the mutilation. He evidently thought this tolerably conclusive, and agreed with me that such evidence is so overwhelming that any positive results believed to be obtained from experiments made at the present day require the most searching scrutiny. I also suggested as evidence of the same dominating kind, the rupture of the hymen in the female, and Professor Lloyd Morgan's observation that newly hatched chickens have no instinctive knowledge of water.

Among the things Dr. Holmes said, were the following :—

Life over eighty is the *bain de pied*,—that good measure which, running over, bathes the foot of the wine-glass.

After eighty a man has seen everything twice over.

The mind in old age is like a palimpsest on which the uppermost records are faintly written, while those beneath are quite distinct. An old person does not remember the events of the day or year but he recalls with perfect clearness those which are long past.

He spoke of Emerson stamping his foot with rage when he could not remember a name.¹

I said that the truest results would be gained by an examination conducted at least six months after all work had come to an end; and that a man who has just learnt his subject is probably a worse teacher than one who learnt it long ago, although the former may know much more. This follows from the beneficial

¹ Mr. Houghton the publisher, of Cambridge, Mass., also told me that this difficulty in recalling a name grew on Emerson very strongly towards the end of his life.

forgetting of less important details and the perspective in which the fundamental principles gradually come to stand in the mind of one who has learnt intelligently.

[We may compare the saying,—‘Education is what’s left when you’ve forgotten all you ever knew.’]

To this he said ‘I can give you a metaphor for that’. and instanced an imperfect crystal of alum which becomes perfect after being placed for some time in water, when the irregular parts are gradually dissolved away.

Speaking of the Corbett-Mitchell prize-fight which had just been concluded, he said ‘I own to a lurking sympathy with prize-fighting, perhaps because I am so unfitted for the ring myself’; and he instanced Charles Kingsley as one who felt the same sympathy and knew the names of all the great fighters.

Dr. Holmes told me that he would never repeat to any one what Tennyson said to him when he entered his house. It was a thing he would not have expected him to say. William James said ‘Won’t you tell us? There are no reporters here’. But Dr. Holmes replied with emphasis :—

I have said that I will never tell any one. It was not a thing that I should have supposed any man would say to a guest he had invited to his house.

He also told us that he took no notice of the remark, but passed it off. At first I thought he meant it was something extremely complimentary; but afterwards it seemed clear that it was something excessively rude. He said that it was not a very successful visit, that he ought to have asked Tennyson to read his own poems,

but this he did not like to do. He added slyly that every poet rather likes to read his own verses.

William James's request led to reminiscences of the publication of private information, and he mentioned a well-known American writer who came to him and began questioning him on all kinds of subjects. He soon became suspicious, and asked 'Do you intend to publish this?', and when his questioner admitted the intention he got no more information. The same writer, he said, went afterwards to James Russell Lowell and then published all his private opinions.

Dr. Holmes's impressions of a great man were summed up in the words 'He was very like other people'.

Speaking of Charles Darwin, he said that he was proud to remember that he had once corrected him on a statement of scientific fact. He could not remember what the point was, but said that Darwin courteously accepted the correction.

He mentioned with pleasure (as he has also written in one of his works) the great men born in the same year with himself (1809), — Darwin, Tennyson, Gladstone, and Lincoln, and he gave, with characteristic felicity, a brief description of each.

I first met Dr. Holmes at a garden-party at Professor Max Müller's, when he came to Oxford in the summer of 1886 to receive the D.C.L., during his *Hundred Days in Europe*. He then asked me what I was interested in, and when told of some recent work on the colours of insects, said that smooth caterpillars gave him a feeling of horror, but that he did not object to the hairy ones.

At the 'Saturday Club' I alluded to his Oxford visit, and asked if he remembered the voice from the gallery of the Sheldonian Theatre when the degree was being conferred on him. He had forgotten the incident and said that he was not at all well and very tired during the visit.

The voice, addressed to Jowett, who was then Vice-Chancellor, had said,—'The Autocrat's laughing at you!'

CHAPTER X

OXFORD REFORM AND THE BRITISH EXAMINATION SYSTEM

A FEW thoughts on University reform, or rather the return of Oxford to all that is best in her past history, and on the British examination system, are to be found scattered through some preceding chapters. I have therefore thought it well to devote the last chapter to some brief statements upon these much-debated and complicated problems.

The two following articles appeared in the columns of *Nature*. I desire to thank the proprietors for the permission to reprint them on the present occasion.

THE EMPIRE AND UNIVERSITY LIFE

An article published in *Nature* for July 6, 1905 (lxxii. 217-18), written with reference to an appeal for additional funds, published in the same number, and signed by over forty professors and heads of departments of the University of Oxford. The introduction to the appeal concluded with the following paragraph:—

'We feel that it is not too much to claim that the annual output in research and teaching from the small inadequately endowed—often miserably endowed—departments of the university, justifies the confident conclusion that a liberal provision for existing and imminent needs would be followed by results of the highest importance to the world and the Empire as well as to the university herself. The results would be three-fold—the advancement of learning, which is the highest and noblest function of a university; the adequate teaching of many subjects of the first importance, now

imperfectly provided, or not provided at all; the inestimable benefits conferred upon students by living in an atmosphere of research.'

The article has been revised for the purpose of the present volume.

We publish to-day a statement signed by more than forty Professors and Heads of Departments of the University of Oxford setting forth a scheme for large increase in the facilities for research and for teaching. The names represent, with singular completeness, the varied lines of research which happily are pursued at Oxford; and it is an encouragement among the many unsatisfactory features in the intellectual life of the nation that such men are ready and willing to stand side by side, each sympathizing with the needs of other workers, each desiring to grant the fullest opportunities for research on the broadest lines.

It is doubtless felt in Oxford, as it is in London, that the real conflict in this country is not between science and classics, between theology and philosophy, or between the true followers of any branches of learning, but that the great educational struggle of our time and race is of an utterly different kind. On the one side are ranged those who hold that the much-needed intellectual inspiration of our youth can only be received in an atmosphere of learning, can only be given by men who are themselves students; on the opposite side stand those who uphold the ancient Chinese and the modern British educational methods. We recognize to the full the Imperial importance of the subject. Young men instructed by purveyors of second-hand knowledge are not likely to develop the germs of imagination and originality; and the time in which such development is generally possible is all too brief. When once the critical period of intellectual growth has been devoted solely to the collection and re-collection of material for the examiner, any awakening of original power is rare

indeed. We have merely created one Briton the more incapable of using his birthright, out of sympathy with the movement which would help others to gain what he has lost; and his want of sympathy may mean a great deal. He may become a journalist and help to frame the opinion of the Nation, he may enter Parliament and help to marshal the educational forces upon which our future existence most surely depends, he may become a schoolmaster or a College tutor and do unto others even as he has been done by.

It cannot be disguised that things are in many respects worse than they were half a century ago. The University Commissioners of 1850 said of Oxford:—‘It is generally acknowledged that both Oxford and the country at large suffer greatly from the absence of a body of learned men devoting their lives to the cultivation of science, and to the direction of academical education.’

The Commissioners of a quarter of a century later did, indeed, largely increase the number of University professors, but it left them powerless—muzzled lions chained by the leg. The whole power of influencing the passing generations of young men it left in the hands of a score of independent corporations—nearly all of them ancient, and with noble traditions of high learning and profound research; but, in the intellectual backwater of our time, each has strained to become a petty University and the successful rival of all the other petty Universities—the successful rival, that is, in the qualities developed by examination, and in nothing higher. To this end each has freely spent its endowments in entrance scholarships to compete with other Colleges for the men who will do best in examinations, and each has striven to secure, before and beyond all others, the most successful purveyor of knowledge which will be useful in examinations. We say, intentionally and deliberately, that each College *has* done these things, but are far from implying that all of them

have no higher aims at the present time. We are only too glad to recognize in recent years a change of spirit which has led to significant departures from the scheme of the last University Commissioners. Magdalen, New College, and Brasenose have been noble leaders in a noble cause—the return of Oxford to ideals of learning which have been suppressed, but not altogether killed, by a false and injurious educational system. We gladly recognize clear evidence of the same spirit in other societies, and we are well aware that others, again, strongly desire to make provision for the highest learning, but are unable to do so while their whole available funds barely suffice to enable them to keep their place in the unfortunate and wasteful inter-collegiate competition which dominates both our ancient Universities.

There is, however, one College in which the necessity for such competition is reduced to a minimum, and it is precisely here that the last Commissioners inflicted the crowning injury upon the intellectual life of Oxford—they set their seal on the existing constitution of All Souls. A College almost without the responsibility and the care of undergraduates is created, it would seem, to be the home of the highest learning and research. And what is it? Well, apart from a distinguished professoriate, a generous assistance to the Bodleian, and the occasional election of men of learning to her fellowships—for all of which we freely and gladly express our gratitude—All Souls merely exists in order to encourage the worst features of an intellectual training which exists by and for examination alone. Only recently the governing body rejected the movement, which happily existed among some of the members, to ask for evidence of original power in the candidates who compete for the fellowships. Yet All Souls might readily do as much for learning in Oxford by her fellowships as she now does to prevent learning—as she now does to turn the attention of the ablest men towards what will pay in examinations, and to shut their ears to the still small

voice of latent imagination and original power. If All Souls gave her two fellowships each year for evidence of research, the ablest of the men studying the subjects of her choice would demand of their teachers inspiration and guidance in the highest work. Where the ablest men lead others would soon follow, and the whole intellectual atmosphere would rapidly change.

All Souls unaided could do an immense deal to compel the other Colleges to provide higher teaching, or, even better, to encourage their men to get help outside the College walls. As it is, she provides the strongest of all the forces which chain Oxford to that unhappy infatuation which has had so disastrous an effect on the imagination, the initiative, the resourcefulness of the Nation.

The title of this article was chosen in the profound conviction that interests much wider and more important than those of Oxford and Cambridge are at stake. Our ancient Universities have heavy responsibilities, extending far beyond their historic walls. Every new University and University College in the Empire draws its teachers from Oxford and Cambridge, and, for good or for evil, moulds the broad features of its intellectual life upon the pattern supplied by these ancient seats of learning.

In the supreme interests of the Empire, as well as of the University itself, we fully sympathize with the aims of those who desire to render Oxford a more efficient instrument of research and the highest and most stimulating teaching, but we have no right to claim their sympathy or support for our own views on University and collegiate life. The onlooker may occasionally see weaknesses and obvious measures of reform hidden from those on the spot, or appearing to them as a far-off ideal impossible of realization, at least in this generation. Speaking for those who watch from without, who admire and would preserve and strengthen the truly inspiring elements of the academic life at both our

ancient Universities, we would gladly see them subject to the following simple, but, as we believe, efficient measure of reform. To many in Oxford and Cambridge such a reform will appear sweeping and revolutionary to an extraordinary degree. To others, and we venture to believe to the vast majority of thinking men outside, it merely appears as a change that will enable our ancient Universities to combine all the advantages of other seats of learning with their own distinctive advantage of collegiate life.

The whole of the teaching should be entirely under the control of the University, which in its boards already possesses at least the foundation of the necessary apparatus. College fellowships should be given in part for University teaching and in part for original work, to be held only during the continuance of research. A career would thus be open for originality of a high order, and the ablest men would flock to our ancient seats of learning and render them indeed worthy of the name. Residence in homes of ancient learning would gain added inspiration when the greatest traditions of the past were renewed and maintained.

Even with things as they are, Oxford and Cambridge, though greatly injured by competitive examinations, have been far less injured than England in general; and this they owe to the residential system. Little thought of, neglected by the builders, the head stone of the educational corner is here to be found. Where mind meets mind in the free intercourse of youth there springs from the contact some of that fire which, under our present system, is rarely to be obtained in any other way; and not only this, but many other priceless advantages in the battle of life are also conferred.

The changes we have advocated would only add to this beneficent system fresh influences for good by substituting for the barren pride of First Classes and University Prizes the enthusiasm for a society which nobly holds its own in those achievements which bring

renown wherever the advancement of learning is held in honour. That this is the desire of those who have signed the memorial we do not doubt, however much they may disagree with the methods here suggested for the attainment of their ends. For our part we feel entire confidence in the beneficent influence of the increase in efficiency for which they plead, and we should gladly see the funds provided for the purpose.

In former centuries the highest learning was encouraged in this country by the munificence of 'founders and benefactors'; and we are glad to know that one of the needs set forth in the accompanying statement has already been generously met, and more than met, by the establishment of a Department presided over by a Beit Professor of Colonial History. But the signs of the times do not encourage us to anticipate any very large or fruitful following of this fine example. We can see no prospect of carrying out the suggested scheme in anything like completeness, except by a re-arrangement of the revenues of the University and the Colleges, or by the action of a Government which is convinced that the national well-being is imperilled, the national existence at stake.

THE REFORM OF OXFORD UNIVERSITY

An article published in *Nature* for May 13, 1909 (lxxx. 311-12), written with reference to the Chancellor's scheme of reform and the consequent Resolutions of the Hebdomadal Council.

Revised for the present volume.

Before entering upon any discussion of the scheme presented by the Chancellor to the University of Oxford, and of the consequent action taken by the Hebdomadal Council, it is important to make a few introductory remarks on the conditions under which the effort for reform from within is about to be made.

In the first place, there is no question or debate about the inestimable value of collegiate residence. On this

point all in Oxford, and it may be hoped all outside it, are agreed. Secondly, the strongest difference of opinion on questions of University policy exists, as it has existed in the past at Oxford, without the least personal feeling. It is useless to attempt to conceal the fact that under the existing system there is and must be conflict between the interests of the University and the Colleges, but those who take the strongest line on the one side will be among the first to admit, nay, to proclaim, the devotion and self-sacrifice which are brought to the support of the other. In many cases, indeed, a University policy is most firmly sustained by men whose interests are bound up with the Colleges. The question is what is best for Oxford, and through Oxford for the Empire, and to hold a strong opinion in such a controversy ought not to weaken and generally does not weaken a loyal and sympathetic co-operation with those who maintain the opposite position.

The point of view which will be maintained in the present article, and from which the Chancellor's book and the resolutions of Council will be examined, is that of the University as opposed to the Colleges. We maintain that Oxford will gain as a seat of research and learning, and in its influence—already beneficial in the highest degree—on the lives of its students by restoring to the University much of its ancient power and authority, and by leaving the Colleges as dignified and historic homes, where, if teaching is carried on at all, it will be under the control of the University.

The first series of resolutions deals with the three governing bodies of the University—Convocation (M.A.'s who retain their names on University and College books), Congregation (such M.A.'s residing within a mile and a half of the centre of Oxford), and the Hebdomadal Council. This latter important body, by which alone legislation can be initiated in Congregation and Convocation, consists of three *ex-officio* members, the Vice-Chancellor and the two Proctors, and eighteen members

Convocation, Congregation, and Council 265

elected by Congregation. Of these eighteen, six must be Heads of Colleges, six Professors, and six M.A.'s. The power of Council will be best understood by the statement that, except on its initiative, no modification can be made in the existing examination system, no expenditure of a sum exceeding £100, no loan of book or manuscript out of the Bodleian Library.

It is impossible in the brief compass of a single article to do more than sketch the broadest outlines, but it is submitted that details here necessarily omitted do not substantially modify the accuracy of the picture suggested to the reader. Thus Congregation includes, but is not substantially affected by including, a complex list of *ex-officio* members; the Chancellor is a member of Council, but is rarely present; the Bodleian has the power of lending to the Radcliffe Library, and consequently to the readers of the latter.

Lord Curzon proposes that the three categories of Council should be given up, and Council itself has resolved as far as possible 'to abolish or modify the existing division into three orders'. There is no doubt that the power of the University would be seriously weakened by the abolition of the professorial category unless provision be made for University representation of some other kind. The Heads are collegiate appointments, for even at Christ Church, the headship of which is in the gift of the Crown, it is customary to select a Dean from among the members of the governing body. In addition to the power given to the Colleges by the presence of the six Heads on Council, it should be remembered that the Vice-Chancellor must, under the present constitution, be the Head of a College. The Oxford of an older day, with its greater leisure and greater freedom, gave to the Colleges Heads almost invariably picturesque and sometimes inspiring. In an organization mainly developed with reference to the rush and tumble of the modern race for First Classes between the Colleges, the headship of the future will

generally be, if not the retiring pension, at least the pension of a retiring tutor or bursar. If it be impossible to modify this system, an effort should be made to render the income of the position more commensurate with its duties. A small increase of stipend would amply compensate for the loss of much drudgery and an acceptance of the dignified and not exacting position of chairman. In these circumstances, too, it would be beneficial to abolish the category of Heads in Council and the custom of necessarily selecting the Vice-Chancellor from among them. For ourselves, however, we should greatly prefer to leave the emoluments and the University status of the Heads unchanged, but to give the University a voice in their appointment. Among the headships are some of the few fairly well paid posts in Oxford, and it would be an immense gain to the University, and an even greater gain to the Colleges, if it were generally understood that they should be filled by men for whom leisure and opportunity, and the release after long service from teaching, would mean more time spent and greater efforts made in the cause of learning.

The two Proctors, popularly supposed to be mainly concerned with the behaviour of undergraduates outside their College walls, are in reality the representatives of the M.A.'s, and in this capacity hold their *ex-officio* seats on Council as well as on nearly all the important boards of the University. Lord Curzon's proposal that they should serve for two years, and go out of office in rotation, would undoubtedly facilitate business, but is open to criticism for the following reason. The educating effect of a proctorship is remarkable. It is an important advantage that every year a member of the governing body of two Colleges should learn by personal experience that the University of Oxford is something more than a name. The Proctors certainly do learn this lesson, and a man who has held the office, although only for one year, looks on his University with different eyes. We should seriously question the wisdom of reducing

the number of those who receive so illuminating an experience. The principle of Lord Curzon's proposal would be carried into effect and its main advantages secured by rotation with a half-yearly period.

That Congregation should be restricted to those M.A.'s who perform academic functions is, like many another desirable reform, merely a return to the original intention. It was proposed by Council a few months ago, but rejected by a small majority in Congregation. We may now hope and believe that with the support of the Chancellor and the renewed support of Council it will become an actual fact. The academic functions here suggested as qualifying for membership of Congregation are 'teaching and administrative'. Of course, all academic teaching to be valuable must be associated with research, and 'teaching' was doubtless intended to be read in this sense; but in England it is unfortunately still premature to trust to the general acceptance of such an interpretation.

We do not touch on the tremendous and perhaps rather barren problem of the reform of Convocation. It is possible that, with greatly increased powers conferred on the Boards of Faculties, the consideration of this much disputed and very intricate question might advantageously be postponed.

The principle strongly advocated by the Chancellor and adopted in one of the Resolutions, 'that Greek be no longer required as a necessary subject for a degree in Arts,' was some years ago accepted by Council and successfully brought before Congregation, although the subsequent attempt to introduce a definite scheme was attended with failure. It is difficult to understand the feelings of those students of the noblest of all languages and all literatures in attaching so much value to the miserable and irritating minimum now required. It is sometimes said that the scientific student, requiring to propose new terms, would be benefited by possessing a knowledge of Greek, but it would be disastrous to the

interests of language were he to make the attempt with a hundredfold the experience. The field is a very dangerous one, and full of pitfalls even for the most accomplished scholars. It is also said that the Englishman without Greek would find difficulty in understanding the meaning of numbers of English words. The answer is obvious. The moderate number of Greek words which are used over and over again in English should be taught as part of that most important, most neglected branch of a boy's education—his own language.

The principle of an entrance examination preliminary to Matriculation would relieve the University from its present undignified position, compelled as it is to matriculate any and every student presented by a College.

The Chancellor's principle of a Board of Finance, accepted by Council, is of the highest importance. Indeed, this principle alone may go far to secure the dominant influence of the University. It is to be presumed that the Board will possess the power of preventing the waste of funds by unnecessary duplication of teaching no less than by unnecessary or extravagant buildings. Of equal importance is the co-operating principle, 'that some reconstitution of the Faculties and Boards of Faculties should take place, with a view to the more systematic and economical organization of University and College teaching.' It is to be hoped that the reconstituted Boards, with the addition of a Council of the Faculties, may relieve the Hebdomadal Council of the entire examination-system, propose names for Honorary Degrees, advise the Board of Finance in the administration or control of the combined tuition fees, appoint all lecturers, and exercise advisory powers in the appointment of tutors.

The Resolution, appointing a committee 'to consider and confer with the Colleges as to the emoluments and tenure of senior scholarships and of fellowships', is of almost equal importance to that of the two resolutions last touched upon. It is to be regretted that the whole

system of prize-fellowships as instituted by the last Commission, including the award by examination, was not condemned. It is sometimes said that it is such a good thing for politics, the Bar, and journalism that an able young man should be supported during the early barren years. No doubt it is a very good thing. Then let politics, the Bar, and journalism see to it. While there are capable students in Oxford unable to follow the cause of learning for the want of such funds, it is a scandalous abuse of academic endowment that they should be used in London to smooth the path to a professional career.

With regard to the following proposals we need say no more than that they command our entire sympathy and approval:—The reconsideration of the scheme of College scholarships and exhibitions; an improvement in the executive machinery of the University; a better constitution of electoral boards to professorships; and the provision, if possible, of a professorial pension scheme; a reconsideration of University and College fees; and a discussion as to the possibility of reducing the expenses of living in College.

There remains, however, one important reform which touches closely the dignity of the University. Oxford ought to regain its ancient long-lost power of admitting students, just as Berlin or Paris admits them, without compelling them to join any other body. If a senior American or Continental student now desires to work in Oxford under a Professor, and to become for the time a member of the University, the authorities can only reply that he must first arrange to attach himself to a College or to the body of Non-Collegiate Students. The situation is so strange to those accustomed to the ways of other Universities that the student would probably in most cases be invited to work without joining the University, which thus loses the fees he is willing to pay and much of the distinction conferred by his researches. A proposal to admit such students to the

University only just failed to pass Council a few years ago, and then only in consequence of opposition raised on behalf of the Non-Collegiate Students. It is possible that the advantages of a collegiate title to express what has from the first been a reality would conciliate much of this opposition. It would be a wise policy to admit frankly that the Non-Collegiate body, in everything except residence within the walls of a College, possesses a collegiate structure, to adopt the name 'St. Catherine's College', and to let the clumsy title 'Non-Collegiate Student' go the way of the older and even less desirable term 'Unattached'. We might then reasonably hope that some benefactor interested in hard work and economical living at the University would be glad to erect a building where all the immense advantages of corporate life would be conferred on a large and deserving body of students. In such a College, if well managed, living ought to be considerably cheaper than in 'licensed lodgings' in the city. In this way we believe that 'the improvement of the position of Non-Collegiate students' sought by the Chancellor and by Council can best be brought about.

We have said enough to show how wide-reaching and remarkable, and, as we believe, beneficent, is the scheme of reform presented to Oxford University by the Chancellor. Not less remarkable is the effect it has already produced upon a seat of learning sometimes described, in old days perhaps correctly, but now with singular inaccuracy, as 'sunk in port wine and prejudice'.

The concluding pages of this last chapter are concerned with the peculiar obsession of the British people, the examination system.

After the lapse of nearly thirty years Rolleston's impeachment of the examination system, quoted on pp. 215-17, is not so true of Oxford as it was when he

wrote the words. There has been a marked change in the intellectual atmosphere,—but the charge is still far too true. It is probable that the uncertainty of the test is less of an evil than it was, because fortunately less is built upon it. We do not in general stake so much on a class as in former years: we often wait for sounder evidence. But while the gambling element is less evident than when Rolleston wrote, other evils remain undiminished. Rolleston in his 1863 letter on p. 215 spoke of the ‘evil to the very best men . . . who are a very small class’. But the number of men whose interest is cramped and blunted by examination is not small. It is very large.

As soon as a man begins to feel a real enthusiasm and zeal in any direction, at that very moment he is compelled to pull himself backwards with a jerk. He has already strayed into a region traversed by veins of richest ore, but from that pure gold can never be minted the coin that buys a place in the class-list. A man with a fresh and living interest in his subject—and such men are not a small proportion—will be attracted and jerked back, again and ever again, until knowledge seen through the medium of the examination system comes to resemble a beautiful landscape shown in a bad cinematograph. It is not the beauty but the discomfort which leaves the dominant impression on his mind. It must be remembered too that numbers of the ‘bad men’ referred to by Rolleston, men who seem to be very second-rate or third-rate, are in reality able students repelled into indifference and idleness by the very system that is supposed to be their only possible salvation.

We are constantly told that the high academic tradition of encouraging the student to think and work independently, to follow his inspiration wherever it leads, may be all very well for other nations, but certainly will not do for Englishmen.

The most fatal thing about the dominant British system is its power of self-perpetuation. Teachers themselves reared in an atmosphere of examinations give their pupils no chance of growth under any other conditions. And then they bid us look at the average Englishman and ask us if *he* is likely to work for the pure love of his subject.

In their own image created they him, and then said, 'Behold, it is very bad.'

I do not admit the dilemma that a University system must be moulded for the weak men or for the strong, that either the strong must suffer for the sake of the weak or the weak for the sake of the strong. There is, in my opinion, no reason why both systems should not be in operation together in the same University. But conceding, for the sake of argument, that only one system is possible at one time, then that country will prevail which looks to its best material rather than to its worst. The English intellect and the English imagination are at least as good as the German, but the German University system encourages the development of power when it is there, while in England power must burst through unaided, and is too often crushed in the effort. In Germany the weak man at work upon his thesis toils painfully after the able and original student, but in the process he may discover some unsuspected germ of

originality in himself; and if not, if his labour be entirely futile, the system is still far better than one which forces the strongest man into the yoke specially contrived for the discipline of the weakest.

There is another evil which attends a highly specialized development of the examination system,—the effect upon the examiner. Sir Oliver Lodge once told me of the time when he was in for the Matriculation of London University, and walking up and down the room as invigilating examiners were Henry Smith and Joseph Sylvester!

The modern Jerusalem does not indeed kill the prophets: she is far too economical. She tempts them to undertake hack work and they are thus deprived of prophetic gift and made quite useful at the same time!

And here in Oxford we cannot escape the censure that must deservedly fall on those who use the finest instruments for rough and unsuitable work. When Henry Smith's death brought a world-wide tribute to his genius, Jowett, so I have heard, used words such as these:—

I knew he was a good man and I knew he was a clever man, but I did not know he was a great man.

How indeed could he be expected to know? To the Master of Balliol, Henry Smith was one of the Mathematical teachers of a College that strained every nerve to keep ahead in the race for classes and University prizes.

The passages quoted below were published in 1908¹:—

A little knowledge, we are told, is a dangerous thing,

¹ *Essays on Evolution*, Poulton, Oxford, 1908, pp. 197-9.

but as regards the awakening and the growth of the most indispensable part of our intellectual equipment—the imagination—it may be more truly said that excessive knowledge is a dangerous thing. Owing to the deadly grip of the examination system upon our country, we develop the memory far too exclusively, and a poor sort of memory at that, valuable for the purposes of the barrister but of little use for any other career. The imagination is not only neglected but actually stunted and atrophied by forcing into disproportionate growth an antagonistic intellectual faculty of a rather low order.

Intellectual faculties are of course combined in all kinds of ways, and there are plenty of men richly endowed by nature with both imagination and memory. Their success in the British system depends upon the lower and not upon the higher faculty. Success is only possible for the ablest and most original minds when they happen to be also amply provided with the entirely different and much lower power. And how many of them are classed as failures for the want of it? It is impossible under our system to answer the question, but my experience of many men who have failed in examination but immediately began to develop rapidly when their enthusiasm was aroused, leads me to infer that it is a high proportion.

With the very best intentions, but with the very worst effects, the idea has taken root in this country that the imagination must not be allowed free play until some arbitrary amount of knowledge has been absorbed, with the result that too often all original faculty is waterlogged and drowned in a sea of facts. We lose sight of the educational value of research, and the fact that the imagination needs exercise and grows by perfor-

mance. We frequently hear of the danger of encouraging crude work. The real danger is the other way: it is only too easy to discourage and dishearten, forgetting the great truth that a first research, poor and immature though it be, means a rich intellectual growth—forgetting that to chill the divine spark is often to quench it for ever.

The home of information is in this country too often the grave of the imagination. The mind of man appeals to the known for instruction, to the unknown for inspiration; and the teacher who understands education, which means development, will continually bring his pupils, however young, with a stimulating shock right up against the boundaries of knowledge.

The commonly received British doctrine teaches that research may only be attempted after the most heroic preparation. Existing knowledge of any important educational subject may be likened to a vast plain dipping beyond the horizon in every direction, and the student is supposed to explore it all in a superficial kind of way before proceeding to climb the height which he would fain make his own.

The student who adheres to the resolution that he will learn everything about a broad subject before he begins to work for himself within its borders, will never begin that work.

In a true system of education, developing the higher as well as the lower faculties, he would be shown the main road[s] traversing the plain, but his search for unconquered peaks would be aided from the first, in the full knowledge that a wide extent of country round the mountain base would be gladly explored and learnt with a zest and a thoroughness attainable in no other way. And if the appetite for discovery be not acquired

early in life it is hardly ever acquired at all. For, as regards research, it is not so much in the old age of which Matthew Arnold wrote, as in the tantalizing consciousness of strength unfit for highest exercise that—

—long the way appears, which seem'd so short
 To the less practised eye of sanguine youth ;
 And high the mountain-tops, in cloudy air,
 The mountain-tops where is the throne of Truth,
 Tops in life's morning-sun so bright and bare !

Once reached in youth they will be seen ever more clearly in after life, and if the pathos of its close should be deepened by a time of failing power, it will be illumined by the bright and unquenchable memory of the heights.

How did the examination test get such a hold upon Britain? This system and its twin brother, advancement rigidly dependent on seniority, probably owe their strength to the fact that they are the defence of the lower classes against the social leverage possessed by the upper. John Bright once described the Services as 'a system of outdoor relief for the aristocracy!' It is human nature and not the aristocracy that is to be blamed. Any class would have done the same if it had the power. Human nature is so built that, as my friend Professor Walter Raleigh once pointed out to me, the one favour that a man values more highly than any that can be conferred upon him is,—a secure position for his son.

Although it is not the aristocracy but human nature that is responsible for the danger referred to in the last paragraph, the reality of the danger cannot be doubted. I have heard Jowett criticized on the ground that he had

injured the country by convincing the young inheritors of great names that they had a mission in life! When such men, possessing a moderate share of ability and power, are obviously worthy and at the same time filled with the patriotic desire to serve, the mere force of social tradition is enough to place them in positions which really require the highest capacity that can be secured by search in the widest field.

It is to be noted that neither examination nor advancement by seniority have ever been pushed to the same injurious extremes in the Empire-building activity of commerce. In commerce the results are so obvious, the standard of success or failure so easy to apply, that there is comparative freedom from the dangers of social leverage and from the injurious defences that have been raised against it.

It is also to be observed that the dangers of social leverage, though always to be feared and most carefully guarded against, are not now so great as in the past.

It is not to be doubted that the methods of commerce applied to other kinds of work would result in immensely increased efficiency in the service of the Empire. No one will deny that the object of the country is to secure the services of the man who is best fitted for the work that has to be done. Who can question that such a man can be best selected by *looking to all the evidence* instead of merely to the barrister's power of disgorging in a given time a certain amount of knowledge absorbed for the express purpose of being thus disgorged.

Looking to all the evidence unfortunately means to trust advice, and this seems to let in the possibility of

the old danger. It has, however, been already pointed out that this danger is far less grave than it was. The suggestion of change in a single example will probably be better than a lengthened discussion of general principles.

The Indian Civil Service was one of the earliest and is still considered one of the most successful examples of the results of selection based on examination. A considerable number of Oxford men gain the appointments. The results are admitted to be good. We must always remember the solid foundation of truth on which a statesman, Lord Palmerston I believe, built his defence of an appointment which had been attacked as a job—that, in his experience, *any* Englishman, when placed in a position of responsibility, acquitted himself favourably.

If now the University were asked to appoint a Committee which after collecting all available evidence should nominate candidates equal in number to the average of, say, the last three years, it cannot be doubted that even better results would be seen—better than those obtained elsewhere by the ordinary test and better than those at present obtained in Oxford.

Such a Committee could be trusted. It would look to all the evidence, and looking to all the evidence means that India would be better served.

Within the same century the world has seen the Island power of the extreme East learning the most progressive methods of the West, and applying them to her own boundless advancement, while the Island power of the West has been, almost at the same time,

imitating one of the least progressive methods of an Eastern Empire—a method already effete in its ancestral home—and thereby reducing the available stock of intelligence, originality, initiative, and the fearless assumption of responsibility.

It is the greatest up-and-down oscillation the world has ever seen. And the clear vision of Charles Kingsley foresaw the danger to the West in 1863:—

Then Tom came to a very famous island . . . And when Tom got on shore . . . he looked round for the people of the island: but instead of men, women, and children, he found nothing but turnips . . . And the turnips began crying to Tom, in half a dozen different languages at once, and all of them badly spoken, 'I can't learn my lesson; do come and help me!' . . . 'And what good on earth will it do you if I did tell you?' quoth Tom. Well, they didn't know that: all they knew was the examiner was coming.¹ . . .

How much has England suffered since the time when this warning was uttered—suffered by the doings and the want of doings of turnips that might have been men!

¹ *Water Babies*, London and Cambridge, 1863.



APPENDIX I

SOME BALLIOL MEN IN RESIDENCE WITH JOHN VIRIAMU JONES

THIS Appendix records the names referred to on p. 47. The first list includes men who were already at Balliol when Vir came up. A few of these were very senior men remaining in residence long after they had graduated. The other five lists contain the names of men who came into residence in the years 1876-80, respectively. The names in each list are arranged as Scholars, Exhibitioners, and Commoners of the College. When the name of the University is unmentioned Oxford is to be understood. The date in parentheses is that of matriculation.

I. SOME OF THE MEN WHO ENTERED BALLIOL BEFORE 1876 AND WERE IN RESIDENCE IN THAT YEAR.

Scholars.

A. J. ASHTON (1874).—K.C.

R. R. FARRER (1875).—Fellow of All Souls. Died 1883.

LAZARUS FLETCHER (1872).—F.R.S.: Director of the Natural History Museum, South Kensington: formerly Fellow of University.

P. LYTTELTON GELL (1872).—J.P., Oxfordshire and Middlesex.

- M. G. GLAZEBROOK (1872).—Canon of Ely: formerly High Master of Manchester Grammar School and Head Master of Clifton College.
- A. D. GODLEY (1874).—Public Orator in the University: Fellow of Magdalen.
- S. G. HAMILTON (1874).—Formerly Fellow of Hertford.
- RICHARD LODGE (1874). Exhibitioner, 1874; scholar, 1875.—Hon. LL.D., Glasgow: Professor of History in Edinburgh University since 1899: First Professor of History in Glasgow University, 1894-9: formerly Fellow of Brasenose.
- ALFRED MILNER (1873), also Jenkyns Exhibitioner: Treasurer of the Union, 1875-6; President, 1876.—Viscount Milner, P.C., G.C.B., K.C.B., G.C.M.G.; Hon. D.C.L., Oxon.; Hon. LL.D., Cantab.: Fellow of New College.
- H. R. REICHEL (1875).—Sir Harry Reichel, Hon. LL.D., Glasgow: Principal of the University College of N. Wales since 1884: Vice-Chancellor University of Wales, 1899-1901, and 1905-7: formerly Fellow of All Souls, 1880-95: formerly Fellow of Jesus College.
- J. D. ROGERS (1875).—Formerly Fellow of University.
- A. P. THOMAS (1874).—(See pp. 207-13 and Appendix V, p. 315) Professor of Natural History, Auckland, New Zealand.
- T. F. TOUT (1875).—Professor of Mediaeval and Modern History in the Victoria University of Manchester since 1890; formerly Fellow of Pembroke.
- C. E. VAUGHAN (1873).—Professor of English Literature in the University of Leeds since 1904: formerly Professor of English Literature, University College of South Wales, 1889-98.
- T. H. WARREN (1872), Librarian of the Union, 1875-6.—Hon. D.C.L., Oxon.: Vice-Chancellor of the University, 1906-10; President of Magdalen.

Exhibitioners Senior to 1876.

- JAMES BONAR (1873), Snell Exhibitioner.—LL.D., Glasgow : Deputy Master Canadian Branch of Royal Mint, Ottawa, since 1907.
- B. F. C. COSTELLOE (1874), Librarian of the Union, 1877.—Member of London County Council. Died 1899.
- W. P. KER (1874), Snell Exhibitioner.—LL.D., Glasgow : Fellow British Academy : Professor of English Literature, University College, London : Fellow of All Souls : formerly Professor of English Literature and History in University College of S. Wales, 1883-9.
- JOHN MACCUNN (1872), Snell Exhibitioner.—M.A., LL.D., Glasgow : Professor of Philosophy in the University of Liverpool from Foundation to 1910.
- J. J. MASSINGHAM (1873).—Fellow of Merton. Died 1878.
- J. H. MUIRHEAD (1875), Snell Exhibitioner.—M.A. ; LL.D., Glasgow : Professor of Philosophy in the University of Birmingham since 1900.
- D. G. RITCHIE (1874).—Professor of Logic and Metaphysics in the University of St. Andrews : formerly Fellow of Jesus College. Died 1903.
- W. G. RUTHERFORD (1873).—Head Master of Westminster School : formerly Fellow of University. Died 1907.
- WALTER SCOTT (1874).—Emeritus Professor of Greek in the University of Sydney, New South Wales : formerly Fellow of Merton.
- W. S. SICHEL (1873).—Author.

Commoners Senior to 1876.

- A. A. BAUMANN (1874), Treasurer of the Union, 1877 ; President, 1877.—M.P., Peckham, 1885-6.

- J. E. C. BODLEY (1873).—Corresp. Member of the French Institute.
- HON. W. ST. J. F. BRODRICK (1875), President of the Union, 1878.—Viscount Midleton, P.C., J.P., D.L.: M.P., West Surrey, 1880-5; Guildford Division, 1885-1906: Secretary of State for War, 1900-3; for India, 1903-5.
- ANDREW CLARK (1875).—LL.D., St. Andrews: Hon. Fellow and formerly Fellow and Tutor of Lincoln.
- HARRY DUFF (1874).—Fellow of All Souls. Died 1905.
- LOUIS DYER (1874).—Formerly Assistant Professor of Greek, Harvard University, and Professor of Greek, Cornell University. Died 1908.
- W. H. GRENFELL (1874).—Baron Desborough, C.V.O., J.P., D.L.: Chairman of Thames Conservancy Board: M.P., Salisbury, 1880-5; Hereford, 1892; Wycombe Div. Bucks, 1900-5.
- E. H. HAYES (1873).—Fellow of New College.
- A. V. LAZARUS (1875), now A. Venis.—Formerly Principal of Government College, Benares.
- VISCOUNT LYMINGTON (1873), President of the Union, 1877.—Earl of Portsmouth, J.P., D.L., F.S.A. Parliamentary Under Secretary for War, 1905-8: M.P., Barnstaple, 1880-5; N. Devon, 1885-91.
- L. A. MONTEFIORE (1873).—Believed, but erroneously as I am informed by his brother, to have been the original of 'Daniel Deronda'. Died 1879.
- W. H. MYERS (1873).—J.P., D.L.: M.P., Winchester, 1892-1906.
- R. L. POOLE (1874).—Ph.D., Leipzig; Hon. LL.D., Edin.: Fellow British Academy: Editor English Historical Review: Keeper of University Archives: Fellow of Magdalen.
- J. H. ROUND (1874).—D.L., Hon. LL.D., Edin.

ARNOLD TOYNBEE (1875).—Political Economist: Bursar of Balliol. Died 1883.

P. J. TOYNBEE (1874).—D.Litt. Author.

A. D. O. WEDDERBURN (1873).—K.C.: Recorder of Gravesend since 1897.

II. SOME OF THE MEN WHO ENTERED BALLIOL IN 1876.

Scholars.

C. H. FIRTH. (Matric., New Coll., 1875).—Hon. LL.D., Aberdeen; Hon. D.Litt., Cantab. and Sheff.: Fellow British Academy: Regius Professor of Modern History in the University since 1904: formerly Fellow of All Souls.

P. S. U. PICKERING.—F.R.S.

F. J. SMITH.—M.D., F.R.C.P.: Physician and Lecturer on Forensic Medicine, London Hospital, since 1902.

Exhibitioners in 1876.

F. C. MONTAGUE.—Professor of History, University College, London, since 1893: formerly Fellow of Oriol.

W. H. WILKINSON.—H.M. Consul-General Yunnan and Kweichow since 1902.

R. E. YOUNGHUSBAND.—C.S.I.: Commissioner Lahore: Member of Council of Lieut.-Governor of the Punjab.

Commoners in 1876.

Hon. W. N. BRUCE.—C.B.: Principal Assistant Secretary (Secondary Schools), Board of Education.

Sir SAVILE B. CROSSLEY.—P.C.: M.P., Lowestoft Div. of N. Suffolk, 1882-90; Halifax, 1900-6.

- G. G. LEVESON-GOWER.—Commissioner of Woods and Forests since 1908: Junior Lord of Treasury, 1885-6: Comptroller of H.M. Household, 1892-5: Second Church Estates Commissioner, 1892-5: M.P., North-West Staffordshire, 1885-6; Stoke-on-Trent, 1890-5.
- E. J. RUGGLES-BRISE.—Sir Evelyn Ruggles-Brise, K.C.B.: Chairman of the Prisons Commission since 1895.

III. SOME OF THE MEN WHO ENTERED BALLIOL IN 1877.

Scholars.

- J. T. CUNNINGHAM.—Formerly Fellow of University: Zoologist.
- W. J. FAUSSET.—Prebendary of Wells: formerly Head Master of Ripon Grammar School and of Bath College.
- S. J. LOW.—Fellow of King's College, London: formerly Editor of *St. James' Gazette* and Literary Editor of the *Standard*.
- P. E. MATHESON.—Fellow of New College since 1889: Oxford Secretary of Oxford and Cambridge Schools Examination Board.

Exhibitioners in 1877.

- W. M. LINDSAY, Snell Exhibitioner.—LL.D., Glasgow; Hon. Ph.D., Heidelberg; Hon. Litt.D., Dublin: Fellow British Academy: Professor of Humanity, St. Andrews University: formerly Fellow of Jesus College.
- S. G. OWEN.—Student and Tutor of Christ Church.
- R. H. PINKERTON, Snell Exhibitioner.—Professor of Applied Mathematics in University College of S. Wales since 1887.

Commoners in 1877.

- H. C. BOURNE.—C.M.G. : Colonial Secretary, Jamaica, since 1904.
- Hon. H. R. W. CHARTERIS.—Lord Elcho : M.P. Had-
dingtonshire, 1883-5 ; Ipswich, 1886-95.
- E. B. S. ESCOTT.—Sir Bickham Sweet-Escott, K.C.M.G.,
C.M.G. : Governor and Commissioner-in-Chief, Lee-
ward Isles, since 1906.
- A. H. HARDINGE, Secretary of the Union, 1879.—Sir
Arthur Hardinge, K.C.B., K.C.M.G. : Minister to
Belgium since 1906 : Fellow of All Souls.
- W. R. LAWRENCE.—Sir Walter Lawrence, Bart.,
G.C.I.E., K.C.I.E., C.I.E. Member of Council of
India, 1907-9.
- HON. H. L. MULHOLLAND.—Baron Dunleath : M.P.,
North Londonderry, 1885-95.
- J. RENNELL RODD.—Rt. Hon. Sir James Rennell
Rodd, G.C.V.O., K.C.M.G., P.C. : H.M. Ambassador
to the Court of Italy since 1908.
- LORD HERBRAND RUSSELL.—Duke of Bedford : Trustee
of the British Museum : President of the Zoological
Society since 1899.
- H. MORSE STEPHENS.—Professor of History and
Director of University Extension, University of
California.

IV. SOME OF THE MEN WHO ENTERED
BALLIOL IN 1878.

Scholars.

- SAMUEL ALEXANDER.—Hon. LL.D., St. Andrews :
Professor of Philosophy at the Victoria University of
Manchester since 1893 : Past V.P. of Aristotelian
Society : formerly Fellow of Lincoln.

- W. J. ASHLEY.—Professor of Commerce since 1901, and Dean of the Faculty of Commerce since 1902, University of Birmingham: formerly Professor of Political Economy at Toronto University and at Harvard University: formerly Fellow of Lincoln.
- J. A. HAMILTON, Treasurer of the Union, 1881; President, 1882.—Hon. Sir J. A. Hamilton: one of the Justices of the King's Bench Division: formerly Fellow, now Hon. Fellow of Magdalen: formerly Counsel to the University.
- J. W. MACKAIL.—Hon. LL.D., Edin.: Assistant Secretary in the Board of Education: Professor of Poetry in the University since 1906: formerly Fellow of Balliol.

Exhibitioners in 1878.

- H. C. BEECHING.—Hon. Litt.D., Durham: Canon of Westminster Abbey since 1902.
- A. C. CLARK.—Reader in Latin in the University: Fellow of Queen's.
- C. A. SPRING-RICE.—Sir Cecil Spring-Rice, K.C.M.G.: Envoy Extraordinary and Minister Plenipotentiary to Sweden since 1908.

Commoners in 1878.

- HON. G. N. CURZON, President of the Union, 1880.—Baron Curzon of Kedleston, D.C.L., Oxon.; Hon. LL.D., Cantab.; G.C.S.I., G.C.I.E., P.C., J.P., F.R.S.: Fellow British Academy: Viceroy of India, 1899-1905: Chancellor of the University since 1907: formerly Fellow of All Souls: Hon. Fellow, Balliol.

V. SOME OF THE MEN WHO ENTERED
BALLIOL IN 1879.

Scholars.

E. H. CULLEY.—F.R. Met. Soc.: formerly Professor of Pure Mathematics and Lecturer in Classics, St. David's College, Lampeter: formerly Head Master of Royal Institution School, Liverpool, and of Monmouth Grammar School. Died 1900.

Commoners in 1879.

C. E. DAWKINS.—Sir Clinton Dawkins, K.C.B.: Under-Secretary of State for Finance in Egypt, 1895: Financial Member of the Viceroy of India's Council, 1899. Died 1905.

BOLTON KING.—Director of Education to the Warwickshire Council. Author

J. E. MARSH.—F.R.S.: Fellow of Merton.

VI. SOME OF THE MEN WHO ENTERED
BALLIOL IN 1880.

Scholars.

H. B. BAKER.—D.Sc., F.R.S.: Lee's Reader in Chemistry in the University since 1903: Student of Christ Church.

C. N. E. ELIOT.—Sir Charles Eliot, K.C.M.G.; Hon. LL.D., Edin.; Hon. D.C.L., Durham: Vice-Chancellor, University of Sheffield, since 1905: Fellow of Trinity: formerly H.M.'s Commissioner for British East Africa.

W. R. HARDIE.—Professor of Humanity, Edinburgh University, since 1895.

L. J. ROGERS.—Professor of Mathematics, University of Leeds.

Exhibitioner in 1880.

LEONARD HUXLEY.—Author.

Commoners in 1880.

SIR EDWARD GREY.—D.C.L., P.C., D.L. : Secretary of State for Foreign Affairs since 1905 : M.P., Berwick-on-Tweed, since 1885.

ROBERT YOUNGER.—K.C.

APPENDIX II

THE 'SIGNAL-ELM' IN 'THYRSIS'

THE reading of 'Thyrsis' here followed is that of Professor G. C. Macaulay in his selection of *Poems by Matthew Arnold*, London, 1896.

The identification of the famous tree in 'Thyrsis' has been often discussed. The present writer, having been for many years on the look-out for evidence bearing on the problem, thinks that it may now be convenient to record the facts he has been able to collect and the conclusion at which he has arrived.

The traditional view identifies the 'Signal-elm' with the elm-like oak, or 'Umbrella-tree', by one of the greens of the old and now abandoned Boar's Hill golf-links—a tree which, seen from the Oxford side of the hill, has a singularly striking and majestic appearance. Opponents of this interpretation have suggested that the 'Signal-elm' is represented by an elm in the clump on Cumnor Hurst, or by a tree that formerly stood on the ridge of Boar's Hill in the same direction as the 'Umbrella-tree', but at a much higher level, or finally that it is represented by no particular tree but is purely imaginary.

I have been led to a strong conviction that the traditional interpretation is the right one.

'Thyrsis' first appeared in *Macmillan's Magazine* for April 1866,—a date so recent that we might reasonably hope for evidence based upon memory. And, indeed, proof of this kind has been brought forward by Mrs.

Margaret Woods, who, many years ago, in a letter to *The Oxford Magazine*, stated that her father, the late Dean Bradley, a constant companion of Matthew Arnold in walks over the Cumnor Range, had learnt from the poet himself that the traditional 'Umbrella-tree' was the original of the 'Signal-elm'. This identification has been still more recently maintained by Mrs. Woods in her charming book, *The Invader* (London, 1907).

The same conviction is expressed by my friend, Mr. J. R. Thursfield, who tells me that he received the information from the poet's brother, Mr. Thomas Arnold.

I have also inquired of Mrs. Humphry Ward and, at her kind suggestion, of her aunt, the poet's sister; but no decisive memories could be recalled by either.

My friend Mr. L. R. Phelps once heard, he tells me, that Matthew Arnold, questioned on the subject, had been rather annoyed, but said that the tree could be seen from the railway. He believed that the remark had been made to Mr. R. G. Tatton, but this turned out to be a mistake. If, however, Matthew Arnold used such words the problem is settled; for the 'Umbrella-tree' is a most striking object from two points on the Great Western. The first and best of these is just before the train to London reaches the bridge over the reservoir, the second just before that over the Abingdon Road. From the first point of view it is seen in a magnificent setting. From the rushing train we gain for a moment a vision as of a long bare tree-bordered slope, which, like a Titanic avenue leading straight to the heart of the hills, seems, although

it is only seeming, to stretch ever upward to the crowning ridge, where alone, in the very centre of the vista, the tree stands silhouetted against the sky. When next Mrs. Woods visits Oxford, perhaps for one of the three glorious festivals pictured in *The Invader* with so much sympathy and insight and charm, I hope that she will look towards the Cumnor Range and see for herself that the 'Signal-elm' has not, as she maintains in the same volume, been deprived of its solitary grandeur by the presence of upstart modern growths, but that it is still, as in the past, 'bare on its lonely ridge.'

Evidence based on the memory of the poet's words is in favour of the traditional view.¹ We now come to the consideration of the evidence supplied by the poem itself.

It can hardly be doubted that, among many other thoughts and visions of the past, the poem *does* recall the memories of a particular winter's day when the writer, at a certain point in his walk, missed the tree, but suddenly came in sight of it, 'back'd by the sunset,' as he sped into a 'farther' field in order to avoid the hunters riding down the hillside towards him. It is also clear that he was on his way to the tree, but that the spot from which he suddenly came in sight of it

¹ I can now add the evidence brought forward by Mr. G. Claridge Druce in his letter to *The Oxford Magazine* for Dec. 8, 1910, p. 138. Mr. Druce states that in 1879 no tree except the traditional one was pointed out as the original of the 'Signal-elm'. He first learnt of the identification from Canon Tuckwell, a contemporary and friend of Arnold. The testimony of George Simms, who was known to Arnold, and of W. F. Baxter is also added. Mr. Druce concludes that the tree is probably about 200 years old.

was still sufficiently distant to prevent him from reaching it when evening closed in.

The traditional walk from South Hinksey by way of Chilswell Farm (the 'Childsworth Farm' of the poem) to the traditional tree, fulfils all the conditions described with a completeness wanting to any other walk and any other tree that have been suggested.

The whole poem is proof that Matthew Arnold when he took the walk was pondering over the old happy associations. When we realize this it is not difficult to understand how it was that, wrapped in reverie, he did not notice the tree at the bridge over the reservoir from which it is so conspicuous, or again, above South Hinksey, from the path along the top of the grassy north-western slope of the deep narrow little valley, with Chilswell Copse clinging to its steep opposite bank. If we suppose that the current of his musings led Matthew Arnold to think of the tree after the slight descent from the grassy summit by the Old Quarry, and after crossing the stile into the path that skirts the south-eastern border of the field¹ containing Chilswell Farm, then everything is consistent with the third stanza. The tree itself is inconspicuous at this stile and from the first section of the field-path beyond. Along the whole second section right up to Chilswell Farm, it is entirely hidden by the line of trees to the left of the path.

When the Farm is passed and we emerge on the lower slopes of the grassy upland beyond, there sud-

¹ Field 492 of the 1876 Survey (25½ in. to the mile). Numbers and names of local features printed in this Appendix are quoted from the above-mentioned map.

denly bursts on the view a wide expanse of copse-strewn hillside rising to a not distant ridge sharp-cut against the sky. We look round and expect to see the 'Signal-elm', but even here it is still concealed. The trees scattered over the hillside are few and far between, but they are enough to form a most effectual screen. Chief among them is the right-hand or western tree of a familiar pair between the two old putting-greens that lay just beyond the Farm. This tree is an old and spreading oak, which being close at hand, obstructs the view of the distant 'Signal-elm' over a considerable length of the track up the lower slopes past the Farm.

This is the part of the poet's walk to which, in my opinion, the words of the 3rd stanza refer, a spot close to or perhaps at the very place where the field-road crosses the path from South Hinksey, a spot from which one expects to see the tree, but nevertheless cannot see it:—

Only, methinks, some loss of habit's power
 Befalls me wandering through this upland dim.
Once pass'd I blindfold here, at any hour;
 Now seldom come I, since I came with him.
 That single elm-tree bright
Against the west—I miss it! is it gone?

The succeeding twelve stanzas (4-15) are supposed to be spoken at the same point, and were probably founded upon thoughts and memories which actually passed through his mind as the poet paused at the spot where he expected to see but missed the 'elm'. The 11th stanza develops naturally out of the preceding lovely lines lamenting the vainness of the hope that a Sicilian

Goddess might be moved by songs of the Cumnor Range and of the Thames :—

Well! wind-dispersed and vain the words will be,
 Yet, Thyrsis, let me give my grief its hour
 In the old haunt, and find our tree-topp'd hill!
 Who, if not I, for questing here hath power?

But when the poet recalls the old intimate memories which prove his fitness for the search, he passes on, with ease and grace, into thoughts on the flight of time, the enforced repose of old age, and the welcome approach of death, and is still pausing on the lower slope beyond the Farm when his soliloquy is suddenly ended by the interruption described in the 16th stanza :—

But hush! the upland hath a sudden loss
 Of quiet!—Look, adown the dusk hill-side,
 A troop of Oxford hunters going home,
 As in old days, jovial and talking, ride!
 From hunting with the Berkshire hounds they come.

I suggest that Matthew Arnold avoided the hunters by hurrying through the gate of a field (499) that lay close at hand on his left—the most obvious refuge as well as the nearest. This gate opens into the field-road which crosses the path just beyond the Farm, and it is only about 75 yards from the spot which the poet is here supposed to have reached. Once in that field he would be out of the way of the horses, whether they passed down the narrow path by which he had come, or, as is more probable, by the field-road itself, running south-eastward to the main road opposite Bagley Wood. But if Arnold wandered only 20 yards into the field he

would come in sight of the 'Signal-elm', the trees that intervened being now to the right of the line of sight. Fifty yards within the field would have given him a really fine view of it. Furthermore, as I ascertained on the evening of Nov. 20, 1910, the 'Signal-elm', as thus seen, rises magnificently against the glow of a winter sunset, the sun itself being on its right.

This interpretation is entirely consistent with the rest of the 16th stanza :—

Quick! let me fly, and cross
Into yon farther field!—'Tis done; and see,
Back'd by the sunset, which doth glorify
The orange and pale violet evening-sky,
Bare on its lonely ridge, the Tree! the Tree!

The words 'yon farther field' were peculiarly appropriate to 499; for, although it was so near, another field (500) had to be entered before reaching it. From the intersection of field-road and path it is about 30 yards to the entrance of field 500, while another 45 along the road within this latter field makes up the 75 yards mentioned on p. 296 as the distance to the gate of 499.

The position of field 499 is also quite consistent with the first half of the 17th stanza, in which we are told that 'Eve lets down her veil' and hence—'I cannot reach the signal-tree to-night'.

From the point where I suggest that Arnold saw the 'Signal-elm' to the tree itself is rather under half a mile as a bird flies and rather over half a mile as a man would have walked in those days, without the advantages introduced in later years by the golf-club.

The remaining stanzas of the poem are supposed to

be spoken in sight of the tree, and here too were probably founded on the memory of thoughts that arose as he lingered in the field waiting for the hunters to pass and gazing on the 'Signal-elm'.

If the interpretation here suggested be correct, the whole poem, after the first line of the 3rd stanza, is supposed to be spoken at two points in the walk, both just beyond Chilswell Farm and only 100 yards or rather more apart.

There are two main objections to the traditional view. First, that the tree is an oak and not an elm; secondly, that it is not nearly high enough to command the view described in the 2nd stanza:—

The signal-elm, that looks on Ilsley Downs,
The Vale, the three lone weirs, the youthful Thames.

Both difficulties are at once answered if we accept the probable view that the poet did not investigate, but based his statements on the general appearance of the tree and of its position.

The tree looks like an elm and not like an oak.

From the Oxford side of the hill the tree looks as if it stood in a commanding position on the summit of the ridge.

I believe that I am right in claiming that the parts of the poem which are consistent with the traditional view are precisely those that bear the signs of a personal experience on a particular day, while those that are inconsistent not only bear no such impress, but are consistent in the character of their inconsistency.

Of the alternative suggestions I propose to discuss only one. It is still the most recent, although many years

old. I refer to the interpretation suggested by my friend Mr. A. D. Godley in the *Oxford Magazine*,—that the tree was really the elm in the clump on Cumnor Hurst, breaking upon Arnold's sight after he had turned to the right at the Farm and passed northward along the field-road towards Cumnor. On this hypothesis the 'high wood' of the 2nd stanza is 'Powderhill Copse' which commands the field-road from the rising ground on the left, while the hunters are supposed to have come by the path, between Boar's Hill and Cumnor Hurst, from the direction of the Cumnor-Abingdon Road, and Henwood Farm.

There are three main objections to this view.

1. Cumnor Hurst is mentioned in the poem as something evidently different from 'that lone, sky-pointing tree' of the 18th stanza. In the 22nd stanza we read:—

And this rude Cumner ground,
Its fir-topped Hurst, its farms, its quiet fields.

It is impossible to suppose, I think, that the same object would be thus described in two stanzas of a single poem.

2. 'Thyrsis' first appeared in *Macmillan's Magazine* for April 1866, and then in two editions (London, 1867 and 1868) of *New Poems*. In all these first three issues the 2nd stanza reads:—

Runs it not here, the track by Childsworth Farm,
Up past the wood, to where the elm-tree crowns
The hill behind whose ridge the sunset flames?

In the first volume of *Poems* (London, 1869) and in all later editions the words I have italicized become 'Past the high wood'.

Now 'Up past the wood' taken with its context clearly refers to the continuation of the track from South Hinksey up the slope beyond the Farm, on the way to the summit of Boar's Hill and over the hill to Wootton. 'The wood' is obviously 'Birch Copse' on the right.

The words of the first editions are opposed to Mr. Godley's suggestion that Arnold was speaking of the comparatively level field-road which leads northward from the Farm. 'Past the high wood' is consistent with either interpretation.

3. The late Mr. Albert Watson, of Brasenose, well known for his accurate knowledge of the country round Oxford, informed me that the direction of the 'Signal-elm' may be inferred from the episode of the returning hunters. He was sure that their way home would have been by the track already described as leading to the summit and to Wootton. The words 'adown the dusk hill-side' support Mr. Watson's memories of the route, but do not suggest the field-path passing Henwood Farm and avoiding the slopes as much as possible. Mr. Watson did not, however, follow the traditional interpretation, but took Professor G. C. Macaulay's view (*Poems by Matthew Arnold*, London, 1896, pp. 153-4) that the 'Signal-elm' was higher up on the summit of the ridge, and that it has probably disappeared.

Mr. Godley has doubted whether the hunters would ever have descended the slope beyond the Farm on their way to Oxford, but I am informed by Mr. J. C. Blake, whose memories of the Berkshire hounds are unrivalled, that he has often ridden home that way, but

never remembers returning by the path passing Henwood Farm. He tells me that men will go out of their way to avoid the hard roads, and that undergraduates in their desire to get a good two guineas' worth would make the most of their opportunities on the way home. In fact Mr. Blake is inclined to ascribe to this cause the anxiety of the poet to seek safety in the 'farther field'.

One other detail in the description is opposed to Mr. Godley's interpretation. It is, I believe, right to accept as the description of an actual and a vivid personal experience the words in the 16th stanza, which speak of the tree as—

Back'd by the sunset, which doth glorify
The orange and pale violet evening-sky.

Now I have watched a glorious winter sunset in the field-road from Cumnor to Chilswell Farm, standing by the gate of the path that leads to North Hinksey. From this position the sun set nearly at a right angle with the direction of Cumnor Hurst, and almost precisely over the field-path passing Henwood Farm.

I believe that any reader who, choosing a clear winter afternoon, will walk to Chilswell Farm and verify the account here given, will come away convinced that the traditional interpretation is accurate. Even Mr. Godley, after returning from the walk with me, and on a cloudy day too, admitted that he was 'less unrepentant'; and this is perhaps as great an effect as a scientific man can hope to produce on a distinguished literary friend who has suggested a different solution of a literary problem.

APPENDIX III

JOHN VIRIAMU JONES AND THE UNIVERSITY OF WALES

BY SIR ISAMBARD OWEN, D.C.L., M.D., VICE-CHANCELLOR OF THE UNIVERSITY OF BRISTOL

ON a sunny morning in July of the year 1887, a slender, alert, resolute-looking man was shown into my consulting-room in Mayfair. He held an open letter in his hand. 'Tell me, Owen,' he said, 'does this mean business, or is it only to be talk?' I replied, 'We certainly mean business.' 'Then,' said he, 'I will come. I was off this week to Switzerland; I badly need a holiday; but, if there is to be real business, I will give up the Alps and stay.'

The speaker was Viriamu Jones, a visitor ever welcome, and the birth of the University of Wales, long dreamed of in the Principality, was actually begun.

In those days I was an active member of the Honourable Society of Cymmrodorion of London, an association destined to play a critical part in the Welsh educational movement. It held, as it still holds, an annual series of public meetings in connexion with the National Eisteddfod, for the discussion of such social and educational topics as had not managed to get caught in the web of party politics. The 'Cymmrodorion Section', beginning in 1880, had already succeeded in

focusing Welsh opinion on several matters of importance. Its first fruits were the foundation of the National Eisteddfod Association, which since that day has poured new vigour into the oldest institution of Wales. There speedily followed the Society for utilizing the Welsh language in education, the pioneer of a reform of still wider import.

In my many hurried visits to Wales on behalf of the latter movement I had learned to know and admire Viriamu Jones. He was one of its most earnest supporters, and one of the most valued, for there was that in his presence which gave assurance of a man who did not give his support lightly. It was not the only movement for the intellectual advancement of Wales that had his powerful advocacy; but one aim he held especially his own. From the day he formally assumed the Principalship of Cardiff College, he had boldly proclaimed that he had not come to Wales merely to be the Principal of a College. Wales, he maintained, required and must demand an independent University Charter of her own, and the special mission he took upon himself was to bring the result about.

In season and out of season, in academic meetings, on public occasions, in Cymmrodorion Section, in private converse, Viriamu had insisted on this topic, enforcing it by weighty reasoning, by stirring appeals, with the wealth of illustration and metaphor he had always at his command, and with a rare personal attraction that no audience could resist. More men are convinced, it is said, by reiteration than by reason; in Viriamu's hands reiteration on such a topic had all the

charm of novelty. No one ever tired of hearing him upon it, however often he spoke.

It was in the 'eighties' that the Welsh educational movement began to know fruition and to cherish quickened hopes. Elementary education in Wales had in 1870 been put on the same footing as in England. In the lack of proper means for intermediate education lay the most obvious destitution of the country. Projects for legislation were being discussed, but the decade was nearly at an end before the eagerly looked-for Act of Parliament appeared. The fact that eighty-seven new intermediate schools were founded under it may afford some measure of the condition of things the Act was designed to remedy. Higher education was better provided for. The three University Colleges, of Aberystwyth, Bangor, and Cardiff, had by 1887 been for some years at work under favourable conditions, and had begun to find themselves of repute in the academic world. St. David's College, Lampeter, was engaged in its own limited field of work; but the Nonconformist Theological Colleges were still isolated in effort, and discouraged as much by their lack of a common policy as by their want of the resources necessary for their development. Such in brief was the educational Wales in which Viriamu launched his policy.

In the 'eighties', it will be remembered, the granting of new University Charters was not so familiar a procedure as it has since become. The federal Victoria Charter was then a recent measure, as to the wisdom of which many shook their heads. Some abortive political experiments in Ireland represented all there

had been besides of University founding in the United Kingdom since the Universities of Durham and London had come into being in the days of William the Fourth. That Wales, hardly yet fully awakened to her own destinies, still almost destitute of intermediate schools, her very Colleges with only a few years' experience to boast of, should frame an immediate demand for an independent Charter, was a hardy proposition to put seriously forward—one that needed rare confidence and courage to advocate ; but Viriamu's hardiness was the hardiness of genius, his confidence the confidence of knowledge. Viriamu stuck to his point, and carried the day. Little by little he won over his fellow Principals, his professorial colleagues, the successive Presidents of his College, its Council, its Governors, and the public opinion of Cardiff. In 1887 the iron was ready for the anvil ; the anvil was proffered by the London Cymmrodorion.

In that year the National Eisteddfod was held in London. It met in the Albert Hall, and the City and Guilds Technical Institute placed a room at the disposal of the Cymmrodorion Section. The Cymmrodorion, thinking the time was now ripe, abandoned for the nonce its usual miscellaneous programme and resolved to devote the four days of the Section to a continuous discussion on the future development of the Welsh educational system. One sitting was to be devoted to the question of the University Charter, and Viriamu was invited to open the debate. His speech still lives in the memory of many who heard it. Its lucidity, cogency, and conciseness were as conspicuous as the

zeal and conviction of the speaker. In a crowded meeting Viriamu and his converts carried all before them; the need of a University Charter for Wales was unmistakeably affirmed.

At the close of the Conference the Cymmrodorion were requested to convene another, of a more formally representative character, by which the accepted propositions might be reviewed. The second Conference, which assembled in Shrewsbury the following January, included representatives of every order of education or of educational authority in Wales. Viriamu again affirmed his points and his policy was again approved. A third time he was called on to support his case, now become the case of a strong educational party. The conclusions of the Conference were in March 1888 submitted by deputation to a meeting of Members for Welsh constituencies and Peers connected with Wales. In Westminster once more Viriamu's pleading prevailed; and within five years from the commencement of his campaign the need of a University Charter was inscribed on an authoritative Welsh educational programme. He had been ably seconded, but the work was emphatically his.

The three years of hybernation into which the question then passed were due to a cause easily intelligible to those who remember the circumstances of the time and the ideas of University work then prevalent. Men's minds in Wales and the minds of their parliamentary representatives were largely possessed by the assumption that the old University of London was the model on which a University for Wales would

naturally be framed;—an apparatus of examiners and examinations, serenely indifferent to teaching and teachers. Possibly only time was needed to make patent the absurdity of the idea; probably Viriamu did what he could to dispel it in detail. I cannot say; at all events when the project was definitely taken in hand by the three Colleges in 1891 the ambition to possess a minor University of London seemed to have disappeared, and Wales to have arrived at a general agreement as to the kind of institution she wanted. The real difficulties of framing a federal or rather a national scheme could then be faced, and these, indeed, were neither few nor trivial. Wales was a country with a strong national sentiment, but with no recognized centre, and as yet no recognized basis of national organization;—a country in which the population was scattered, travelling difficult and slow, the great towns newly sprung into being, keen rivals of each other, their relative position and possibilities as yet unsettled. A University scheme, if it were ever to be carried into law, must needs command general acceptance, from both North Wales and South, from rural Wales and urban Wales alike, from one town as from another, from every large section of the people and from every considerable educational interest the country contained. The difficult problem was solved, and solved successfully.

A Conference which met in the latter part of 1891 confined itself to laying down a few general principles. The actual production of a scheme was relegated to a Committee of more manageable dimensions, which

held frequent session in Shrewsbury between April and December of 1892. That Viriamu was one of the leading spirits of both Conference and Committee it is needless to say, though the scheme that emerged was not any single man's work. It would be difficult, indeed, to trace the handiwork of any particular individual in it; it was the product of the Committee as a whole. The earlier discussions of the Committee, it is true, ranged more or less along the lines of a draft which Viriamu had aided me in preparing, but not much of the original draft survived in the scheme. Viriamu's converts, in fact, had become a vigorous church, and had developed marked differences of opinion among themselves. But the scheme, when finally settled, was no mere compromise; it was felt by all who had laboured at it to be a consistent whole, and each of its authors seemed to adopt it as his own. Few schemes of the kind can have been more thoroughly discussed. The Committee on one occasion, I remember, sat thirteen hours in a single day. But its devotion was amply justified. The charter of the national University has now existed for seventeen years, and no serious proposal to alter it has ever been made.

The work was by no means ended with the production of a scheme. The scheme was at once printed and circulated throughout Wales. It was formally submitted to the Senates, Councils, and Courts of the three Colleges, to the County and County-Borough Councils, and to a conference on Intermediate Education then sitting; informally to the Press and the entire public. On its authors devolved the task of defending

it both in speech and in writing ; to Viriamu fell the hardest duty of all. To commend the scheme to the authorities of populous, industrial Glamorgan and Monmouthshire and their rising municipalities, to counter the many springs of disintegration these rapidly developing communities contained, to convince them of the advantages to be gained by educational union with rural Wales, of the danger of standing aloof, was Viriamu's work, and his almost alone. It was work that few men could have done, that none could have done so well. There was more concerned in the task than the question of a University scheme. The unity of Wales was really at stake ; and Viriamu's statesmanship had other than merely academic issues.

The general approval of Wales being assured, the further stages of the draft Charter became mainly the care of the London members of the Conference, and of Mr. Arthur Acland, whose share in the matter has never been adequately acknowledged. One sultry midnight in August of 1893, after a short and decisive debate in the House of Commons, we had the gratification of wiring to Viriamu that the contest was over and that the end he had worked for so devotedly and so brilliantly was virtually achieved.

To detail Viriamu's work for the next six years would be almost to write the history of the University of Wales. His hand was in almost everything that was done, the impress of his mind was on almost every important measure that was taken. As first Vice-Chancellor of the University, he mainly moulded its curricula in Arts as well as in Science ; even in the

Faculty of Theology his influence was not unfelt: his voice, time after time, was decisive on larger questions of policy; no matter of University business was too large for him to take up or too small to engage his interest. The confidence which Wales soon came to feel in her new University was largely of his inspiration.

Viriamu's first Vice-Chancellorship was marked by a memorable day for Wales. On the death of Lord Aberdare, the first Chancellor of the University, the office was unanimously offered to, and was accepted by, the Prince of Wales, our lately lost King Edward. One brilliant June day in 1896 His Royal Highness was installed in his high office at Aberystwyth, in the presence of several thousand spectators, official representatives of all parts of Wales. The ceremony was held in a huge marquee, lined inside with the national colours, green and white, refreshingly cool on a sultry forenoon. Viriamu, as Vice-Chancellor, had the honour of placing in our Royal Chancellor's hands a patent of a Doctorate in the University, and of then presenting the Princess of Wales for the degree of Doctor in Music, and Mr. Gladstone for the degree of Doctor in Law.

The results of the Charter speedily vindicated Viriamu's policy, if vindication were still needed. The fears that had been expressed that the University and its degrees would fail to win acceptance elsewhere were soon set at rest. The three University Colleges—for the first time united in their efforts and free to develop on their own lines—gained steadily in numbers and prestige. Even more remarkable was the development of the Theological Colleges, at first recognized and

afterwards formally associated with the University. Nor was this all ; it was speedily perceived that the establishment, for the first time, of a legislative and administrative corporation for Wales on a representative basis was an epoch in the history of the country, and that the cause of Welsh national unity had made material advance.

Viriamu was unquestionably a great man. What he did in the world was but an earnest of what he might have done had his life been spared to Wales and to the Empire. In his last days it was whispered that he was to be offered the Principalship of London ; the choice would have been ratified by all who knew his work in Wales. He was a man who could conceive great aims, who could take broad views of a situation, who could foresee difficulties and foresee how they were to be provided against. He pursued his aims with unflinching perseverance through good and bad years alike. He had complete control over himself and over his own intellect. No prejudice or prepossession was ever allowed to bar the access of fresh evidence to his mind ; no irritation ever led him to endanger his object by a hasty word. No one could sustain an argument more persistently, no one was more ready to acknowledge himself mistaken if he were proved so. Unhappily, his life was cut short before half his career was achieved.

In the vacation of 1898 I joined him in a fortnight's cycle tour in France. I wondered to see so athletic a man so often show signs of fatigue ; I wondered to hear him at times complain of actual pain. It was the first premonition of a fatal malady. We had talked of

another tour for 1899, but before the time came he was laid on a bed of illness. He partly recovered and went abroad. In the course of August, I spent two days in Geneva, surprised to find no news of Viriamu awaiting me. I little dreamed that he was lying ill on the opposite side of the street, and that Mrs. Vir was vainly trying to obtain my address from the too-discreet postal authorities of the city. When she at last succeeded I had quitted Geneva, and her letter caught me at Lyons. I hurried back to find Vir already the better for the skilful treatment of the Genevese physicians. Ten days later I left for England, and it was a year before we could meet again. This time it was at Chamounix ; he looked well and strong, and we all had hopes of his complete recovery. He came back indeed to Cardiff for the autumn term ; but at Christmas his serious symptoms returned, and six months later all was over. His malady was one rare in this country, one which seldom succeeds in attacking any but persons of high nervous and mental endowment. Even Death set his seal on Viriamu Jones as one of the elect.

To the last the University of Wales and Cardiff College were foremost in Viriamu's thoughts. All through the long weeks of suffering in London his face would light up and the old Viriamu seem to return as we discussed the daily budget I brought him of University news, or some letter he had received about College affairs. To University and College alike his death has been an irreparable loss.

APPENDIX IV

AN ARTICLE IN *VANITY FAIR* AND ITS SEQUEL IN 'PRIVATE BUSINESS' AT THE UNION ON FEB. 25, 1875

DR. F. A. DIXEY, F.R.S., has kindly written the following amusing account of an incident in *Private Business* on February 25, 1875,—the meeting following the publication (February 20) of the number of *Vanity Fair* containing the article referred to on p. 151, n. 2.

The incident, according to my recollection, was somewhat as follows:—

F. Gordon Campbell, Scholar (1871) of Exeter, rose in *Private Business* to ask a question of the President. He began by calling attention to what he described as a scurrilous personal attack by an anonymous writer in *Vanity Fair* on 'some of the best-known and most highly respected members of this House'. Lest it should be thought that he was making a mountain out of a molehill, he would ask the patience of the House while he read aloud the article in question, for their information. This he proceeded to do at length, dwelling with ill-concealed delight on various epigrammatic and picturesque details concerning the personal bearing and mannerisms of a certain prominent member. He had just, to the intense amusement of the House, finished a perfectly accurate description of the contortions indulged in by Shirley Shirley, when, as luck would have it, there was a stir and movement at the door, and in walked Shirley himself, all unconscious of what was going on. For a moment the House was taken aback, and Shirley took his place in the semi-circle amid a dead

silence. Then the humour of the situation suddenly struck every one at once, and a roar of laughter shook the roof, redoubled again and again as Shirley, dimly suspecting that his entrance had something to do with the unusual behaviour of the House, 'rose to a point of order,' and, addressing himself to the Chair, reproduced down to the smallest detail all the extravagances of delivery that the House had just heard so graphically described. More and more mystified, Shirley sat down without making it clear what his 'point of order' was; and Gordon Campbell, choking with laughter, finished by asking the President 'whether he could not take steps to suppress the offending publication'.

Next day it was generally understood that Gordon Campbell had written the article himself.

The Minute-book for February 25 records that Gordon Campbell asked a question, but upon a different subject. It also states that Shirley

asked the President if he had seen a recent article in 'Vanity Fair'—since copied in the Undergraduate's Journal: did he not consider it insulting.

The President expressed his regret that reports of the Debates should be sent to the Public Papers.

It is possible that the incident described by Dr. Dixey was beyond the powers of the Secretary, and it is important to note that the imperfection of the minutes of February 25 was the subject of questions at the following meeting. The President then defended the Secretary on the ground that it was manifestly impossible for him to record all that was said. It is on the whole probable that, as soon as it was suspected that Gordon Campbell was the author of the article, the officers determined to prevent any permanent record of the incident from appearing in the Minute-book.

APPENDIX V

THE LIFE-HISTORY OF THE LIVER-FLUKE, THE CAUSE OF 'ROT' IN SHEEP

THE history of the discovery made at Oxford in the years 1880-82 has been given on pp. 207-13. It is probable that some readers may wish for an account of the important and interesting chain of facts thus revealed to the world. The following story has been drawn up from the memoir published by A. P. Thomas in *The Quarterly Journal of Microscopical Science* for January, 1883, p. 99.

The minute oval eggs, produced by the flukes in the liver, pass with the bile into the intestines and out of the body in the droppings. Thomas estimated that 7,400,000 eggs were present in the gall-bladder of a single sheep examined by him, and as its liver contained about 200 flukes, we get an average of 37,000 eggs to each parasite.

And these eggs were found in the gall-bladder alone ; the liver must have contained at least as many more, and eggs had been passed copiously by the sheep for several months. The number of eggs produced by a single fluke may be safely estimated at several hundred thousands.

Exposed within the sheep to the heat of the Mammalian body, the eggs cannot develop. The most favourable temperature is far lower, viz. 23° to 26° Centigrade (73½°

to 79° Fahrenheit). The moisture which is also necessary for them is sufficiently supplied by marshy ground or even ordinary turf damped by dew and rain. Under such conditions development within the egg is commonly complete in two or three weeks, but there are great individual differences. The variable period of development is a fact of 'much practical importance, for eggs scattered over any damp ground may render it dangerous for a long period'.

As the embryo approaches maturity its movements become more and more active. There is a final vigorous stretch, the lid of the egg-shell flies open, and the embryo pushes out the fore part of its body. The excessively fine hair-like filaments or cilia with which it is covered begin to move directly the water touches them, and by their aid the embryo glides rapidly through the water as soon as a few more struggles have liberated it from the egg-shell.

The embryo, thus swimming freely in the water, has the form of a slender cone (about $\frac{1}{200}$ of an inch or 0.13 mm. long) with rounded apex and base, the latter being the head end. In the centre of the head or broad end, which in swimming is directed forwards, is a small rounded projection or 'head papilla' which can be drawn in till it looks like a rounded button, or protruded so far that it becomes a long and delicate cone. The embryo is very sensitive to light, being doubtless guided by a simple organ of vision,—an x-like double eye-spot buried in the transparent body below the base of the head-papilla.

During its short life of about eight hours the embryo

is extremely active, darting here and there and testing every object it happens to meet. If within this period the right snail has not been encountered, the embryo gradually becomes sluggish and dies. If, on the other hand, in the course of its wanderings it happens to touch the little water-snail *Limnaeus truncatulus*, it instantly begins to bore into it. Pressing with its head-papilla, which now becomes pointed, against the snail, the whole embryo spins round like a drill. The papilla lengthens as it sinks deeper and deeper, the soft tissues are forced apart and the embryo finally squeezes its way into the snail. It is probable that the chemical nature of the surface secretion is the stimulus which impels the embryo to bore into this snail and no other. The instinct is by no means perfect, for the embryo will often bore into the hard muscular 'foot', where it cannot develop and soon dies. The most favourable and commonest situation is the lung chamber, although embryos will often reach and develop within the body cavity.

The embryo is then transformed into an inactive 'Sporocyst', losing its covering of ciliated cells and becoming oval in shape. The two eye-spots separate and lose their crescentic form, 'but they, as well as [a trace of] the head-papilla, persist, showing the identity of the young sporocyst with the embryo of the liver-fluke.' As the Sporocyst increases in size its shape becomes that of an irregular elongated sack, finally attaining a length of from $\frac{1}{3}$ to $\frac{1}{8}$ of an inch (0.5-0.7 mm.). The papilla and eye-spots usually disappear. In warm summer weather it may reach its full size in under

a fortnight, but in autumn it only grows at half this rate. The Sporocysts of this species multiply to a certain extent by transverse division, usually at an early stage in their growth. One of the halves retains the traces of the head-papilla and the two eye-spots, while the other is of course without them. The Sporocyst absorbs nutriment by the general surface of its body, and its digestive and muscular systems are in a very degenerate condition.

The parasites multiply largely in the body of the snail by the development within the Sporocyst of numerous broods of a more highly organized form known as the 'Redia'. Numbers of these at different stages of growth, and varying in size and shape, usually give to the parent Sporocyst its irregular outline. As soon as a Redia has gained a length of about $\frac{1}{100}$ of an inch (0.26 mm.) it begins to move more and more actively until it breaks the wall of the Sporocyst and becomes free. The wound contracts and heals, and the remaining younger Redias continue their development, emerging in the same manner as they reach maturity.

The Redias are not sluggish like their parents, but force their way through the tissues of the snail and generally reach the liver. It is interesting that the final stage adapted for life in the sheep and in the snail should both inhabit the liver. In Thomas's experiments the fluke disease was more fatal to the snail than to the sheep, few snails surviving three weeks of artificial infection.

The Redia, which like the Sporocyst has the form of an elongated sack, attains a length of from $\frac{1}{20}$ to $\frac{1}{8}$ of an

inch (1.3–1.6 mm.). It is far more muscular than the Sporocyst, and behind the head the muscles form a projecting ring or collar. Towards the hind end are two short blunt projections which probably greatly assist its movements. Other very essential features which distinguish the Redia from the Sporocyst are the possession of a mouth, digestive tract, and birth-opening for the exit of the brood. The mouth, on the very foremost part of the Redia, leads at once into a muscular chamber which sucks in the food and crushes it when received. It is succeeded by a simple bag-like stomach with no opening to the exterior except through the mouth. The birth-opening is at the side, a little behind the collar.

The Redia produces one of two kinds of offspring—either Redias like itself or the next stage in the cycle of development, the Cercaria. Thomas observed a difference in the numbers of these two kinds of offspring:—

a mother-redia may contain from one to three well-formed daughter-rediae with a few germs in various stages of growth; the highest total observed was ten. On the other hand, in a well-grown redia producing cercariae, I have counted a total of twenty-three.

He also found 'at the beginning of the autumn a redia, containing a single daughter-redia in addition to numerous cercariae and their germs'. It is probable that a Redia produces Redias during the warm weather but that the first advent of the cold of autumn determines the development of Cercarias.

A mature Redia in the Cercaria-producing stage

generally contains about twenty of these offspring of various sizes, and of these from one to three will be approaching complete development. The Cercaria finally leaves the parent by the birth-opening and as rapidly as possible by means of its two suckers and tail crawls and wriggles its way out of the snail. In shape it much resembles a tadpole. In a quiescent state the flattened body is about $\frac{1}{80}$ of an inch (0.28 mm.) long, and $\frac{1}{110}$ of an inch (0.23 mm.) broad, and the tail is more than double the length of the body. Just beneath the fore end is the mouth in the centre of a sucker, while another sucker is placed a little behind the centre of the ventral surface. The mouth leads, as in the Redia, into a muscular chamber which is followed by a narrow gullet dividing just in front of the ventral sucker into two intestinal canals which extend nearly to the hind end of the body.

The Cercaria is at first extremely active, continually contracting and changing its form, but as soon as it has left the snail and touches a solid object such as a blade of grass, it comes to rest, fixes itself, and becomes covered by a snow-white protective covering or cyst. The substance of which the cyst is composed is poured out in a thick layer by the cells on the surface of its body and at once begins to harden. While this process, which only occupies a few minutes, is going on, the tail is lashed from side to side until a specially vigorous movement detaches it altogether. The little cyst with the minute transparent form concealed beneath it remains until the grass-blade to which it is attached is eaten by a sheep. It is probable that liver-flukes some-

times found in man are introduced as cysts attached to water-cress.

As soon as it has been swallowed the gastric secretions of the sheep dissolve the cyst and liberate the little parasite, which, as already explained, is simply the body of the *Cercaria* which escaped from the snail. It penetrates the wall of the stomach and probably reaches its journey's end by entering a blood-vessel; for all the veins of the stomach and intestines lead direct to the liver. No further generations intervene between the minute parasite which was accidentally swallowed and the sexually mature fluke into which it grows—so Thomas concluded—in about six weeks. Except for development of the reproductive system the well-known leaf- or flounder-shaped liver-fluke remains essentially the immensely enlarged body of the *Cercaria*, but the two canals of the forked intestine develop very complex branches, while the ventral sucker becomes larger than the mouth sucker, and comes to occupy a position near to the head, in consequence of the far more rapid growth of the parts behind it. The head end of the fluke—comparatively narrow because of its slower growth—also gains a characteristic covering of spines.

With the attainment of sexual maturity the complicated life-history becomes complete and the cycle begins anew.

INDEX

- Aberdare Hall, Cardiff, 120, 130.
 Aberdare, Lord, 310.
 Aberystwyth, 304; first Congregation of the University of Wales at, 131, 310.
 Acland, Rt. Hon. A. H. D., and the University of Wales, 309.
 Acland, Dr. H. W. (Sir Henry), 81, 199 *n.* 1, 207 *n.* 1, 249.
 Acland, Sir Thomas, 207 *n.* 1.
 'acquired characters', discussion of, at 'Saturday Club', Boston, 252-3.
 'acquired' versus inherent elements in human life, 11-16.
 Ethiopian Region, 189, 189 *n.* 2.
 Afghanistan war, Union Debate on, 170.
 Africa, 189 *n.* 2; British East, 289.
 Agassiz, Alexander, 252.
 Agricultural Holdings Bill, 153 *n.* 1.
 Agriculture, Board of, and the Potato Beetle, 175 *n.* 1.
 Albert Hall, 305.
 alcohol, effects of, 196-7.
 Alexander, S., Balliol and Lincoln, 287.
Alice's Adventures, &c., 77.
 All Souls College, what it is and might be, 124, 260-1; *see also* 268-9.
 Alpine climbing, Vir's delight in, 44, 110, 121-2.
 Alpine Club, Vir a member of (1887), 122.
Alumni Oxonienses, 225 *n.* 1.
 America, 180.
 American Universities, secret societies of, 111.
 Anderson, J. R., Balliol, 88.
 Andrewes, F. W., Christ Church, 22, 54, 230.
 Andrews Prizes awarded to Vir at Univ. Coll., London, 28-9.
 aneurism and vivisection, 178 *n.* 1.
 antler, Hunter's experiment on blood-supply of, 178 *n.* 1.
 ape, Rolleston on man and, 193-4, 201-2.
 aquatic forms and regeneration, 197.
 Archaean of Malvern, 200, 200 *n.* 1.
Arion ater, 209, 210 *n.* 1; *see also* 'slugs'.
 Arnold, Matthew, 77, 91, 122-3, 157 *n.* 5, 228, 276, 291-301.
 Arnold, Dr. T., 158.
 Arnold, Thomas, 292.
 Ashley, W. J., Balliol and Lincoln, 288.
 Ashmolean Natural History Society of Oxfordshire, 250 *n.* 1.
 Ashmolean Society, 116 *n.* 2, 199 *n.* 1, 200, 202-3, 205, 249, 250, 250 *n.* 1.
 Ashton, A. J., Balliol, 70, 281.
 Asquith, H. H., Balliol, at the Union, 144 *n.* 1, 150 *n.* 1, 152 *n.* 1.
 Auckland University, N.Z., 207 *n.* 2, 282.
 Australia, ancestral mammals of, 238.
 Babylon, Soldan of, 88.
 Bagley Wood, 296.
 Bagnall, E., Magdalen Hall (Hertford), 225 *n.* 1.
 Bailey, P. J., 180, 181, 181 *n.* 1.
 Baker, H. B., Balliol and Christ Church, 289.
 Balfour, F. M., 231.
Ballad of Reading Gaol, 108 *n.* 2.
 Balliol when Vir was 'up' (1876-81); distinction of, 36-7, 49; memories of life at, 32-84 (Chapters II, III), 87-93, 99, 115; some men in residence at, 47-8, 281-90; Brakenbury scholar-

- ship gained by Vir at, 29-30, 34, 40; Union offices held by men at, 61-2; *see also* Chapters VI and VII (135-81) for names of Union speakers from; the examination system and, 273; Chapel, 79, 83-4.
- Bangor, 131; *see also* 'University College of N. Wales'.
- Barnett, P. A., Trinity, 47, 48, 72.
- Barrie, J. M., 10.
- barriers to distribution, 198.
- Barry, Mrs. E. M., iii; *see also* 234; help given by, v.
- Barton, D. P., Corpus, 157 *n.* 1, 168.
- Bath College, 21, 286.
- Baumann, A. A., Balliol, 283; at the Union, 60, 61, 155 *n.* 2, 161 *n.* 1, 167; *see also* 157; on 'Bulgarian Atrocities', 60, 155-6; help given by, viii, 156 *n.* 1.
- Baxter, W. F., 293 *n.* 1.
- Beaumont Cottage, Oxford, 45, 66, 72.
- Bedford, tenth Duke of, 207 *n.* 1; eleventh Duke of, 287.
- Bedford Chapel, London, 7, 8, 11.
- beech, 185, 185 *n.* 1.
- Beeching, H. C. (Canon), Balliol, 288.
- Beetle, Colorado Potato, 175, 175 *n.* 1.
- Beit Professorship, 263.
- Belgium, 173 *n.* 1, 287.
- Benares, 284.
- Berlin, 269.
- 'Bess', Thomas Jones's pony, 10.
- Bettany, G. T., 237 *n.* 2.
- bicycling, 54-5; Vir's fondness for, 43, 120-1.
- 'Birch Copse', 300.
- Bird, E. S., Balliol, 47, 72; *see also* 'The Ten St. Giles', facing 73.
- birds, high temperature of, 196; teeth of ancestral, 238, 240.
- Birmingham, 62, 283, 288.
- Blake, J. C., 300-1.
- Boar's Hill, the 'Signal-elm' on, 291-301; old golf-links on, 291, 295, 297.
- Bodleian, 260, 265.
- Bodley, J. E. C., Balliol, 284.
- Bon Gaultier Ballads*, 93.
- Bonar, J., Balliol, 283.
- Bordighera, 217.
- Boston, Mass., 251.
- Bourne, H. C., Balliol, 287.
- Boys, C. V., 120, 244.
- Brading, 120.
- Bradley, Dean, 292.
- brain, effect of alcohol on, 196-7; of man and ape, 193-4, 201-2.
- Brasenose, Oxford's debt to, 260.
- 'Bret Harte', *see* 'Harte'.
- Bright, John, 153, 156 *n.* 1, 276; parody of, 60.
- Bristol, 120.
- Britain, beech and fir in, 185, 185 *n.* 1.
- British Association, 201; York (1881), 38; Cardiff (1891), 120; Bristol (1898), 120; Leeds (1890), 125; Liverpool (1870), 206.
- British and Chinese methods of education, 258, 278-9.
- British Museum, 189, 189 *n.* 1.
- Brock, C., 55, 89.
- Brodrick, Hon. W. St. J. F. (Viscount Midleton), Balliol, 284; at the Union, 61, 155 *n.* 1, 169-70; *see also* 62.
- Brontë, Charlotte, 89.
- Brontë, Emily, 89.
- bronze and iron, 198.
- Broughton, Rhoda, 144 *n.* 4.
- Browning, Mrs. E. B., 89.
- Browning, Robert, Vir's devotion to poetry of, 4, 33, 91-2, 98; in congregation of Thomas Jones, Vir's father, 4, 7; impressions of Thomas Jones by, 7, 8; Thomas Jones comforted by, 11.
- Bruce, Hon. W. N., Balliol, 285.
- Brunner's glands, 187.
- Bryn Chapel, Llanelly, Thomas Jones and, 7.
- Brynmor-Jones, Sir David, 7 *n.* 1, 17, 17 *n.* 1, 30, 129 *n.* 1; help given by, vi; *see also* 5, 6; Mrs. Home on Vir and, 17-18, 31, 86; on Vir's labours for Welsh education, 129-32.
- Bugle Coralline, Rolleston on, 214.

- 'Bulgarian atrocities', Union Debate on, 60, 155-6.
- Bullen, A. H., Worcester, 48; *see also* 'The Ten St. Giles', facing 73.
- Burdett-Coutts Scholarship, 54, 232.
- Burdon Sanderson, Sir John, 183-4.
- 'Buried Cities', 90.
- Burrows, F. R., Trinity, at the Union, 144 *n.* 5, 146 *n.* 2, 147 *n.* 1 and 3, 163 *n.* 1, 171; *see also* illustration facing 167; help given by, viii; President at last Debates in Old Hall, 135.
- 'By the Fireside', 92.
- Byron, 91, 157 *n.* 5.
- Cae-newydd, 5.
- Caesar, 90; Rolleston on, 185, 185 *n.* 1.
- Cahors, siege of, 38.
- California, 287.
- Cambrian of Malvern, 200, 200 *n.* 1.
- Cambridge University, 204; the Union at, 160; other systems compared with Oxford and, 111, 272-3; one secret of charm of, 228; certificates of, 251; responsibilities of, 261; relation to Colleges, 261-3; *see also* 'Colleges'.
- Cameron, D. A., 22.
- Campbell, F. Gordon, Exeter, on an article in *Vanity Fair*, q. v., 313-14.
- Cape, 24; the 'Examining University' at (1873), 25-6.
- Caponsacchi's defence, 98.
- 'Captain Boltrope', 92.
- Cardiff, 21, 98, 120-1, 126-7, 131, 238, 305; *see also* 'University College of S. Wales'.
- Cardiganshire, 14 *n.* 1.
- Carfax Church, 79.
- Carlyle, T., 8, 87.
- Carroll, Lewis, 77.
- Casting vote in a Union election, 172.
- Caswell Bay, 44, 85.
- Caterpillars, Poulton's work on, begun, 124, 243; O. W. Holmes's horror of, 255.
- Cavendish, Lord Frederick, 81.
- Caversham, 55, 68.
- Celts, Rolleston's prejudice against, 190-1.
- Cercaria, a stage in the history of the 'liver-fluke', 212, 319-21.
- Cerebellum, effects of alcohol on, 196.
- Cerebral effects of alcohol, 196.
- Certificates, Ruskin on, 251.
- Ceteosaurus oxoniensis*, 40.
- Chalk and flints, 200-1.
- 'Challenger', 24-5, 235.
- Chalmers, (Sir) Robert, Oriel, 185 *n.* 1.
- Chamounix, 312.
- Chancellor, J. B., Balliol, 47; lines on Vir being 'proctorized' by, 50-2; *see also* 'The Ten St. Giles', facing 73.
- Chancellor of Oxford University, article on the reforms suggested by, 263-70; *see also* 'Curzon, Hon. G. N.'
- 'Charlie one boy day', 40.
- Charteris, Hon. H. R. W. (Lord Elcho), Balliol, 287.
- Cheltenham, 55, 168 *n.* 1.
- Chicot, 38.
- 'Childsworth Farm', *see* 'Chilswell'.
- Chilswell Copse, 294.
- Chilswell Farm, 77, 294-301.
- China, 'Proper' and 'Improper', 140.
- Chinese and British method of education, 258, 278-9.
- Chiton, the eyes of, 235.
- chlorophyll, caterpillar colouring and, 243.
- Christ Church, hour of Hall in the Seventies at, 135-6; attitude towards rowing in the Seventies, of, 136, 136 *n.* 2; headship of, 265.
- Christ Church Meadows, 80.
- circumcision, 202, 252-3.
- Cissbury, 200.
- City and Guilds of London Institute, 115, 305.
- Clarendon Laboratory, 71, 74.

- Clark, A. C., Balliol and Queen's, 288.
- Clark, Andrew, Balliol and Lincoln, 284.
- Clark, T. R., Balliol, 47, 54; *see also* 'The Ten St. Giles', facing 73.
- classification, Rolleston on, 197.
- Clifford, W. K., 28.
- Clifton, Prof. R. B., 71, 74.
- Clifton College, 120, 282.
- climate and distribution, 198.
- Clough, Arthur, 77.
- Clyne Common, 85.
- Cobden, 60.
- Colenso (Bishop of Natal), 79.
- Colleges (of Oxford and Cambridge), benefits of life in, 14, 36-7, 73, 83-4, 111, 262-4; *see also* 228; scholarships of, 259, 268-9; headships of, 265-6; the old Universities and, 259-70; *see also* 'Fellowships'.
- Colorado Potato Beetle, 175, 175 *n.* 1.
- Colovrex, 120.
- Congregation (Oxford), 264-5, 267.
- Congregational Union, 7.
- Convocation (Oxford), 264-5, 267.
- 'Conqueror Worm', 99.
- Cook, E. T., New College, 169, 170; President at first Union Debates in New Hall, 135.
- Corbett-Mitchell prize-fight, 254.
- Cornell University, 284.
- Cornhill Magazine*, 194 *n.* 1.
- Costelloe, B. F. C., Balliol, 65, 283; at the Union, 61, 157 *n.* 2, 168.
- Cotswolds, 55.
- Council (Hebdomadal), 204; categories of, 265-6: article on the Resolutions of, 263-70.
- Cowan, J., Lincoln, 163 *n.* 1.
- Cowley ('Cowelee'), 65.
- Cremation, Union debate on, 154, 174-81.
- Crimean War, 198.
- Crookes, Lady, 199 *n.* 1.
- Crookes, W. (Sir William), on the mechanical action of light, 199, 199 *n.* 1, 200.
- Crossley, Sir Savile B., Balliol, 285.
- Culley, E. H., Balliol, 289.
- Cumnor, 299, 301.
- Cumnor Hurst, 291, 299, 301.
- Cumnor Range, 77, 291-301.
- Cunningham, J. T., Balliol, 286.
- Curzon, Hon. G. N. (Baron Curzon of Kedleston), Balliol, 171, 288; at the Union, 170; help given by, viii; *see also* 'Chancellor of Oxford University'.
- Cymmrodorion Society of London and the University of Wales, 131, 303, 305-6.
- Cyst, as a metaphor, 112; of the Cercaria, 320-1.
- Daily News*, 169 *n.* 2.
- Dallinger, Dr. W. H., 116, 116 *n.* 2, 249-50.
- 'Daniel Deronda', 89, 284.
- Danube, 155-6.
- Dark Blue Bicycle Club, 230.
- Darwin, C., 87, 124, 197, 255.
- Davies, G. S., 55.
- Dawkins, C. E. (Sir Clinton), Balliol, 289.
- Dawson, R., Hertford, 170, 170 *n.* 1; *see also* illustration facing 167.
- De Bello Gallico*, 185 *n.* 1.
- de Vries, on heredity, 46-7.
- Debates, *see* 'Union'.
- deer, an experiment on, and its results, 178, 178 *n.* 1.
- Derby, Lord, 155.
- Deus vulgaris*, 81.
- Diablerets, 121.
- Didcot ('Diddecote'), 64.
- Didunculus, 189.
- Disestablishment, Union debates on, 149-51, 158.
- Distribution of species, 188, 189, 189 *n.* 2, 197-8.
- Divine Order and other Sermons*, 7, 7 *n.* 1.
- Dixey, F. A., Wadham, 141 *n.* 3, 151 *n.* 2, 159 *n.* 3; 163 *n.* 3, 168 *n.* 2; an incident at the Union recalled by, 313-14; help given by, viii.

- Dodgson, C. L. (Lewis Carroll),
Christ Church, 77.
Doncaster, 141 *n.* 3.
D'Orsay, 141 *n.* 3.
Dowlais, 9.
Downs, David, foreman of the
'Hinksey Diggings', 245.
Drama in Oxford, Union debate
on, 158.
Druce, G. Claridge, on the 'Signal-
elm', 293 *n.* 1.
Duff, H., Balliol and All Souls,
284.
Dumas, 37-8.
Dundee, 48.
Dyer, L., Balliol, 284.
'Eagle's Nest', Savoy, 110, 121.
Eastern Question, Union debates
on, 60, 155-8, 167.
Echidna, 238, 241.
Edentata, 187.
Edinburgh, 62, 282.
Education, Board of, 285, 288.
Egoist, 14.
Egypt, 184, 289.
Eisteddfod, 302-3; Cardiff (1883),
117; London (1887), 131, 305.
elections at the Union, 62, 167-
74, 188.
Electrician, 125.
Elements of Embryology, 231.
Elephas primigenius, 233.
Elijah, Ruskin on Mendelssohn's,
248.
Eliot, C. N. E. (Sir Charles),
Balliol, 289.
Eliot, George, 89, 142, 284.
Elliott, Prof. E. B., 75-6.
Ellis, Prof. Robinson, 185 *n.* 1.
Ely, 282.
'Emanuel Amethyst', 93.
embryo, history expressed by, 237.
Emerson, R. W., 253, 253 *n.* 1.
'Empire and University Life'
(from *Nature*), 257-63; *see also*
264.
Enslow Bridge, 39.
environment *versus* heredity, 11-
16.
Erromango, 5.
Escott, E. B. S. (Sir Bickham
Sweet-Escott), Balliol, 287.
Essays in Criticism, 157 *n.* 5.
Essays of E. A. Poe, 99.
Essays on Evolution, 273 *n.* 1.
Essays on Natural Selection,
242.
Eurydice, loss of, 45.
Evans, D. Tyssil, on Viriamu's
labour for Wales, 131-2, 132
n. 1.
Evolution at the Swansea Literary
Society, 87.
Examination system, 24-6, 270-9;
Rolleston on, 189, 214-17, 270-1;
the love of knowledge and, 218-
19; All Souls and the Oxford,
260-1; Faculties and the Ox-
ford, 268; Council and the
Oxford, 265; the Bar alone
prepared for by, 274, 277;
social leverage and, 276-8; the
I. C. S. and, 278.
Examinations, Vir and London, 3,
26-9; Vir and Oxford, 3, 29-31,
72-6.
Examining Universities, 24-6,
306-7.
Experiments on Animals, 178 *n.* 1.
Eyed Hawk caterpillar, 243.
Faculties, Oxford Boards of, 267-8.
Fantine, 92.
Faroe Islands, 'sheep-rot' in the,
209.
Farrar, Dean, 79.
Farrer, R. R., Balliol, 281.
Fasciola hepatica, the 'liver-
fluke', 207-13, 315-21.
fat, Rolleston on, 194.
Faussett, W. J. (Prebendary),
Balliol, 286.
Fellowships at Oxford, 260-2,
268-9.
Femoral Artery, ligature of the,
178, 178 *n.* 1.
Ferney, 120.
Festus, 180, 181, 181 *n.* 1.
Fiddes, G. V., Brasenose, *see*
illustration facing 167.
Field, Judge, 252.
Finance, proposed Oxford Board
of, 268.
fir, 185, 185 *n.* 1, 233.
Firth, C. H., Balliol, 47, 65, 285;

- memories of Vir by, 34-5, 67; help given by, vii.
 Firth College, Sheffield, 47, 48; Vir appointed to, 110, 116.
 Firth, Mark, 117.
 Fitzgerald, Prof. G. F., 244.
 flea, Ruskin on the 'decoration' of the, 250.
 Fletcher, Lazarus, Balliol, 281.
 flints and chalk, 200-1.
 Flower, Sir William H., 188, 202.
 Fluke, *see* 'Liver-fluke'.
Forms of Animal life, 202 *n.* 1, 214, 214 *n.* 2.
Fors Clavigera, 88.
 Forster, W. E., 152.
 Foster, Joseph, 225 *n.* 1.
 Foster, Sir Michael, 231.
 fowl, embryology of, 231; development of skull of, 236-7; water and young, 253.
 Fox, C. J., 37.
 Freeman, H. B., Trinity; *see* illustration facing 167.
 'Friar Tuck', 64.
 Friendship, Vir on the three stages of, 76-7; the moulding force of, 84, 183; in youth and maturity, 110-14.
 'Gated!', 163.
 Gaul, 185 *n.* 1.
 Gell, P. Lyttelton, Balliol, 281.
 Geneva, 120-1, 312.
 Genoa, 216.
 Geology, Vir's London work on, 3, 28-9, 54, 71; taught by Vir at Sheffield, 116; Rolleston's interest in, 186, 200; Poulton's work in, 232-4; *see also* 39-41 and 'Burdett-Coutts'.
Geology of Oxford and the Valley of the Thames, 41.
 'George Eliot', *see* 'Eliot'.
 Germaine, R. A., Brasenose, 61, 61 *n.* 3, 169, 171.
 German Universities, British compared with, 111, 272-3.
 Gerrard, 189, 189 *n.* 1.
 Gill, W., help given by, viii.
 Gladstone, W. E., 81, 255; the grant to Cardiff College and, 119; University of Wales and, 131, 310; criticized at the Union, 151-4, 156, 159.
 Glamorgan, 130, 309.
 Glasgow, 282.
 Glazebrook, M. G. (Canon), Balliol, 282.
 Gloucester, 55.
 Godley, A. D., Balliol and Magdalen, 282, 299-301.
Goodbye Sweetheart, 144 *n.* 4.
 Goodwin, A., Scholar (1868) and Fellow, Balliol, 70, 70 *n.* 1, 81.
 Goodwin, A., Scholar (1875), Balliol, 47, 54, 70 *n.* 1; *see also* 'The Ten St. Giles', facing 73.
 Goodwin, Professor, of Harvard, 252.
 Gordon, J. N., Magdalen, 224.
 Gore, Charles (Bishop of Birmingham), Balliol and Trinity, 62.
 Goschen, G. J., 153, 153 *n.* 2.
 Gould, M. H., Trinity, at the Union, 141 *n.* 3, 143 *n.* 2, 146 *n.* 1, 152 *n.* 2, 153 *n.* 1, *n.* 2; help given by, viii.
 Goura, 189.
 Gower, 90.
 Grant, Professor, Univ. Coll., London, 28.
 Gravesend, 285.
 Great Western Railway, Shipton accident, 205; the 'Umbrella-tree' as seen from, 292-3.
 Greece, 195.
 Greek as a necessary subject, 267-8.
 Green, C. V., Keble, 62, 169.
 Green, J. R., Jesus College, 221.
 Green, Prof. T. H., Balliol, 71, 178 *n.* 1; death of, 71.
 Grenfell, W. H. (Baron Desborough), Balliol, 284.
 Grey, Sir Edward, Balliol, 290.
 Grindelwald, 121.
 Groom, T. T., 200 *n.* 1.
 Grose, T. H., Queen's, 159 *n.* 4.
 Grundy, C. H., St. Edm. Hall, 181.
 Guernsey, 67.
 Hadden, R. H., Merton, at the

- Union, 141 *n.* 2, 144 *n.* 2, 155 *n.* 1, 157 *n.* 4, 159 *n.* 1, 163 *n.* 2.
- Haigh, A. E., Corpus, 169-70.
- Hall, A. W., 190.
- Hamilton, J. A. (Hon. Sir J.), Balliol and Magdalen, 288.
- Hamilton, S. G., Balliol and Hertford, 282.
- Handbook for the Physiological Laboratory*, 176.
- Harcourt, A. G. Vernon, Balliol and Christ Church, 193-4, 244; help given by, v, ix.
- Hardie, W. R., Balliol, 289.
- Hardinge, A. H. (Sir Arthur), Balliol and All Souls, at the Union, 173, 173 *n.* 1, 287; *see also* illustration facing 167.
- Harley, Dr. J., 208.
- Hart, Horace, help given by, ix.
- Harte, Bret, 92-3, 99.
- Hartington, Marquis of, 153.
- Hartland, Sidney, 94.
- Harvard University, 284, 288.
- Hayes, E. H., Balliol and New College, 284.
- Helen's Babies*, 40.
- Helmholtz, 39.
- Henley Regatta, 49, 54.
- Henri at Cahors, 38.
- Henwood Farm, 299-301.
- heredity *versus* environment, 11-16.
- 'Hinksey Diggings', 244-7; *see also* illustration facing 246.
- Hinksey, North, 77, 244-7, 301; *see also* illustration facing 246.
- Hinksey, South, 77, 294-5, 300.
- hippocampus minor*, 193, 201.
- hippopotamus, 189.
- Holmes, Oliver Wendell, 78, 244; at the Saturday Club (1894), 251-6; on 'acquired characters', 252-3; sayings of, 253; a metaphor for memory, 254; on prize-fighting, 254; on Tennyson, Darwin, &c., 254-5; on interviewers, 255; on caterpillars, 255; D.C.L. at Oxford, 255-6.
- Home, Mrs. S., Viriamu's sister, 5, 17, 17 *n.* 2, 88; *see also* 'Maine, Mrs. R.'; help given by, vi; on Thomas Jones, her father, 10, 11, 14-15; on her mother, 9-11; sketch of her brother Morlais by, 18; memories of Vir's childhood by, 14-16, 56; on the friendship of Brynmor and Vir, 17-18, 31, 286; influence upon Vir of, 18-20, 85; value of correspondence between Vir and, 19, 85; letters to Vir from, 20, 30-1, 56-8, 75, 85-7, 115-16; *see also* 'Jones, John Viriamu', for letters to, &c.; on Vir at school-work, 23; memories of Vir by, 12, 37-8; on the Swansea Literary Society, 94; recovery of Vir's manuscript by, 95; on Vir's reading, 98; Essay on 'Ulalume' by Vir and, 103-9; *see also* 95, 98-103; Vir's visits from Cardiff to, 113.
- Home, S., LL.B., 17 *n.* 2; help given by, vi; sketch of youth of Thomas Jones by, 5-7; on Swansea Literary Society, 94; discovery of manuscript of Essay on 'Ulalume' by, 99.
- Horsburgh, E. L. S., Queen's, 170.
- Horton, R. F., New College, 61 *n.* 2; at the Union, 61, 151 *n.* 1, 155 *n.* 1, 159 *n.* 2.
- Houghton, Mr., 253 *n.* 1.
- Huggins, Sir William, sketch of Vir's life by, viii, 3, 4.
- Hughes, T., 224.
- Hundred Days in Europe*, 255.
- Hunter, John, and aneurism, 178 *n.* 1.
- Hunting of the Snark*, 77.
- Huxley, Leonard, Balliol, 290.
- Huxley, T. H., 28, 38-9, 240.
- Hypatia*, 55.
- imagination and memory, 218-20, 274-5.
- In Memoriam*, 2, 63, 228.
- income tax, 159.
- India, 62, 236, 278, 287, 289.
- Indian Civil Service, 28, 278.
- Ingoldsby Legends*, 156.
- inherent *versus* acquired elements in human life, 11-16.
- Inhibition of Bishop of Natal, 79.

- Insects, 124, 175, 175 *n.* 1, 176, 197; Poulton's work on begun, 241-4.
- Intermediate Education Act (Wales), 130.
- 'Intimations of Immortality', 91, 107 *n.* 1.
- intoxication, stages of, 196-7.
- Invader*, 292-3.
- Irving, E. H., Balliol, 47, 53-5, 57, 74; walk with, 44-5; lines by, on Vir being 'proctorized', 50-2; *see also* 'The Ten St. Giles', facing 73.
- Irving, (Sir) Henry, 90.
- Irvonwy, *see* 'Jones, Irvonwy'.
- Isle of Wight, 92, 120.
- Italy, 248, 287.
- 'J. V.', Vir's name at Balliol, 5, 35, 50, 52; *see also* 'Jones, John Viriamu'.
- Jackson, W. H., New College, 193, 205 *n.* 1, 207 *n.* 1, 214 *n.* 2, 230; help in investigation of sheep-rot by, 211-12; help given by, ix.
- Jacomb-Hood, G. P., 22.
- Jamaica, 287.
- James, Mr., 87.
- James, Prof. William, 252, 254-5.
- Jane Eyre*, parody of, 92.
- Jesus College, 34, 49; Fellowships of Welsh Principals (Vir the first) at, 119; Poulton's scholarship and residence at, x, 227-9; Fellowship at, 119.
- Johns Hopkins University, 48.
- 'Jolly Nash', Balliol, 153 *n.* 2.
- Jones, Annie, Vir's sister, 17, 17 *n.* 2; *see* 'Home, Mrs. S.'
- Jones, Brynmor-, *see* 'Brynmor-Jones'.
- Jones, David, Vir's great-uncle, 9.
- Jones, Evan, Vir's grandfather, 5.
- Jones, Griffith, Vir's great-grandfather, 5-6.
- Jones, Irvonwy ('Mon'), Vir's brother, 17, 17 *n.* 3, 18, 30.
- Jones, Jane, wife of Thomas Jones, and Vir's mother; sketch of life of, by her daughter, Mrs. Home, 9-11.
- Jones, John, Vir's great-grandfather, 9.
- JONES, JOHN VIRIAMU, Balliol, *see also* 'J. V.'
- Dedication to, 2.
- help in writing life of, v-viii.
- memories of childhood of, 14-16, 56.
- mother's death, 11, 19.
- companionship of brothers and sister, 16-20, 31.
- at school, 21-4, 34.
- at Univ. Coll., Lond., and London University, 3, 24, 26-9.
- at Oxford, 3, 32-93.
- Balliol scholar, 29, 30, 34.
- appearance (in 1876), 34; *see* illustration (1880) facing 73, and frontispiece (1890).
- intellectual characteristics of, 3, 28-9, 34-8, 90, 311; and their source, 11-16.
- sympathetic kindness of, 38-43, 114-15, 124, 127-8.
- fondness for discussion, 15, 17-18, 31, 35, 80, 311.
- discussions with Poulton, 76-82.
- humorous sayings of, 67-8.
- rooms in Oxford, 41, 45, 58, 66, 68, 72-4, 90-1, 93.
- father's death, 58-9.
- Oxford examinations, 3, 45, 66, 72-6.
- friends among the juniors, 47-9 (*see* illustration facing 73), and seniors, 69-71.
- 'proctorized', 49-52.
- the Union and, 60-2, 135, 169.
- exercise and recreation, 43-6, 63-9, 110, 120-2.
- as a reader, 78-9, 98.
- on R. Browning, 4, 33, 91-2, 98.
- on H. Spencer, 81.
- on materialism, 82.
- on Ruskin, 87-8.
- early literary interests of, 87-93, 99-100.
- 'A Soul's Dream' by, 95-6.
- 'The Tower of Babel, &c.', by, 96-8.
- Essay on 'Ulalume', by his

- sister and, 103-9; *see also* 95, 98-103.
- Post-graduate Oxford work of, 71, 74.
- Fellow of Univ. Coll., Lond., 72, 125.
- Jowett's advice to, 115.
- Principal Firth College, (University of) Sheffield, 3, 110, 116-17.
- thoughts of Oxford, 116, 122-3; its examinations and students, 75-6.
- marriage of, 19, 110, 128.
- Principal of University College of S. Wales, 3, 4, 113-14, 117-19, 124, 129-30.
- Examiner at Oxford, 119; and Fellow of Jesus College, 49, 119.
- Sir Isambard Owen on the University of Wales and, 302-12; *see also* 20-1, 124, 129-33.
- researches of, 4, 123, 125; *see also* 124.
- F.R.S., 125-8.
- letter from Lord Kelvin to, 127-8.
- fatal illness of, 93, 120-1, 132-3, 311-12.
- inscription on statue, 133.
- LETTERS OF:—
- to his sister, 27-9, 42, 55-6, 75, 87-9, 113-15, 118, 132; *see also* 'Home, Mrs. S.', for letters to, &c.
- to his father, 27.
- to his brother-in-law, R. Maine, 42-3.
- to Poulton, 127-8.
- to a friend, 71, 116.
- Jones, Leifchild (Leif) Stratten, M.P., Trinity, Vir's brother, 17, 17 *n.* 4, 119; on Vir's powers and chief interest, 124; help given by, vi.
- Jones, Morlais Glasfryn, Vir's brother, 17, 17 *n.* 5, 18, 27.
- Jones, Mrs. Thomas, 30; *see also* 'Lyric Thoughts, etc.'
- Jones, Thomas, the 'Poet-Preacher' of Wales, Vir's father, 21, 99; youth of, 5-7; personality and voice of, 10, 58; ordained (1844), 7; life of first wife of, by her daughter, Mrs. Home, 9-11; courtship and marriage, 10; his wife's death, 11; R. Browning and, 4, 7, 8, 11; Vir and, 14-16, 30-1, 58-9; Chairman of Congregational Union (1871-2), 7; London pastorate of, 7, 8, 11; Melbourne, 56-7; invited to Oxford, 58; death, 58-9; S. Home's and Sir D. Brynmor-Jones's help, vi, vii.
- Jones, Viriamu, Mrs., help given by, vii.
- Journ. Board Agric.*, 175 *n.* 1.
- Journ. Roy. Agric. Soc.*, 210 *n.* 1, 211 *n.* 1, 212 *n.* 1, *n.* 2, 213, 214 *n.* 1.
- Jowett, B., Master of Balliol, 256, 273, 276; Vir's impressions of, 70; Ashton and, 70; sermons by, 79, 83-4, 84 *n.* 1; advice by, 115, 201.
- Jungfrau, 122.
- Kelvin, Lord, letter to Vir from, 127-8.
- Ker, W. P., Balliol and All Souls, 47, 62, 283; help given by, vii.
- King, Bolton, Balliol, 289.
- King, Sir Seymour, Balliol, 122.
- King Edward VI School, Stratford-on-Avon, 168 *n.* 1.
- King's Bench Division, 288.
- King's College, London, 286.
- Kingsley, Charles, 202, 254; prophetic utterance on examinations by, 279.
- Kirtlington, 39-40.
- Kitchin, G. W. (Dean of Durham), 249, 249 *n.* 1.
- Kweichow, 285.
- La Femme*, 92.
- 'Lady Windermere's Fan', 91.
- Laffan, R. S. de C., Merton, 168, 168 *n.* 1.
- Lahore, 285.
- Lake District, 210.
- Lampeter, 289, 304.
- Langland Bay, 44.

- Lankester, Sir Ray, 197; Poulton's debt to, 244.
- Lawrence, W. R. (Sir Walter), Balliol, 287.
- Lawson, Sir Wilfrid, 171.
- Lazarus, A. V. (now A. Venis), Balliol, 47, 67, 72, 284; *see also* 'The Ten St. Giles', facing 73.
- Leeds, 125, 144 *n.* 4, 282, 289.
- Leeward Isles, 287.
- Leif Jones, *see* 'Jones, Leifchild'.
- Legend of Perseus*, 94.
- Les Quarante-cinq*, 38.
- Leuckart, Prof., independent discovery of history of 'liver-fluke' by, 213.
- Leveson-Gower, G. G., Balliol, 286.
- 'Lewis Carroll', 77.
- Lewisham, 54.
- Libanus Chapel, Morrision, 10.
- Librarian's books opposed at the Union, 139-44.
- Library Committee of the Union (1878), 62; *see also* 140.
- Liddon, H. P., 79, 80.
- Limax agrestis*, 209, 214; *see also* 'slugs'.
- Limnaeus truncatulus*, part played in sheep-rot by, 212-13, 317.
- Lincoln, Abraham, 255.
- Lindsay, W. M., Balliol and Jesus College, 286.
- Little Minister*, 10.
- Liver-fluke, the cause of 'rot' in sheep, history of, 207-13, 315-21.
- Liverpool, 206, 283, 289.
- Llandaff, 117.
- Llandderw, 5.
- Llandrindod, 57.
- Llanelly, 6, 7.
- Llanwrtyd, 6.
- Lodge, Sir Oliver, 120, 273.
- Lodge, Sir, Balliol and Brasenose, 62, 282.
- London Hospital, 285.
- 'Lost Chord', 66.
- Lothair*, parody of, 92-3.
- Low, S. J., Balliol, 286.
- Lowe, Robert, 153.
- Lowell, J. R., 255.
- Lowell Lectures, 251.
- Lyceum, 90.
- Lymington, Viscount (Earl of Portsmouth), Balliol, 161 *n.* 1, 284; election as President of the Union, 61, 168-9.
- Lyndhurst, 120.
- Lyons, 312.
- Lyric Thoughts of the late Thomas Jones*, 5 *n.* 1, 58 *n.* 1, *n.* 2.
- Macan, R. W., Master of University, 204.
- Macaulay, Prof. G. C., 291, 300.
- Macaulay, T. B., 150 *n.* 1.
- MacCunn, J., Balliol, 283.
- Macdonald, George, 16.
- MacGill University, Montreal, 48.
- Mackail, J. W., Balliol, 288.
- Macleod, Crichton, Balliol, 21-2.
- Macleod, Henry Dunning, 21.
- Macleod, Roderick, 21, 28.
- Macmillan's Magazine*, 291, 299.
- Madan, F., Brasenose, help given by, ix.
- Magdalen College, 203, 224-5; thoughts aroused in, 227; the debt of Oxford to, 260.
- Magnus, Sir Philip, 116, 116 *n.* 1.
- Maine, Penmorlan, Vir's nephew, 114.
- Maine, Mrs. R., Vir's sister, 17 *n.* 2, 55, 103; death of daughter, 42; and husband, 114-15; *see also* 'Home, Mrs. S.', for letters of, &c.
- Maine, Robert, Vir's brother-in-law, 17 *n.* 2, 30, 75; letter from Vir to, 42-3; death of, 114-15.
- Maladetta, 122.
- Malvern Hills, 200, 200 *n.* 1.
- Mammals, nitrogenous waste of, 195-6; Poulton's work on begun, 235-41.
- Mammoth, 233.
- Man, Rolleston on ape and, 193-4, 201-2; occasionally attacked by 'liver-fluke', 320-1.
- Manchester, 18, 282, 287.
- Mansfield College, 178 *n.* 1.
- Mapledurham, 54, 68.
- 'Margaret', in 'The Forsaken Merman', 91.

- Marsh, J. E., Balliol and Merton, 289.
 Martin, A. T., Worcester, 21-2, 54, 120; memories of Viriamu by, 35.
 Martin, Cecil, 21.
 Martin, Samuel, 21.
 Massingham, J. J., Balliol, 283.
 Master of Balliol, *see* 'Jowett'.
 Matheson, P. E., Balliol and New College, 72, 286; help given by Mrs. Matheson and, vii, viii.
Matthew Arnold's 'Scholar-Gypsy' and 'Thyrsis', etc., 245 n. 1.
 Maundeville, Sir John, parody of, 64-5.
 Maxwell, Clerk, 28.
 McColl, Canon, 155.
 Melbourne, 56, 57.
 Meldola, Prof. R., Poulton's debt to, 243-4.
Memoir on the Fowl, 237 n. 1.
 Memory, a metaphor of, 32, 253-4; a low faculty, 89 n. 2, 273-4; imagination and, 218-20, 274-5; beneficial forgetting, 253-4.
 Mendelssohn, Ruskin on, 247-9.
 Mercury, Vir on resistance of, 125.
 Meredith, George, 11, 14.
 Merthyr, 9.
 Micklem, N., New College, and the Union, 61, 61 n. 4, 62, 169.
 'Middleton', Dr., 14.
 Mills, B. R. V., Christ Church, 171, 172.
 Milner, A. (Viscount Milner), Balliol and New College, 282; 'proctorized', 49 n. 1; at the Union, 61, 147 n. 2, 151 n. 1, 157 n. 3, 161 n. 2, 174; *see also* 181; help given by, viii.
 Mimicry, Poulton's earliest interest in (1878), 242-3.
Miss Mix, 92.
 'moderator band', 195.
 Monaco, 217.
 Mönch, 122.
 Monmouth, 289.
 Monmouthshire, 117, 125, 130, 309.
 Montague, F. C., Balliol and Oriel, 285.
 Monte Carlo, 217.
 Montefiore, L. A., Balliol, 284.
 Montreal, 48.
 Morgan, J., Vyrnwy, 132 n. 1.
 Morgan, Prof. Lloyd, 253.
 Morley, Prof. H., 75.
 Morley, H. F., 75.
Morphology of the Skull, 237 n. 2.
 Morris, Prof., Univ. Coll., London, 71.
 Morris, William, 91.
 Morrison, 9.
 Moseley, Prof. H. N., 40-1; wonderful insight of, 234-5; Poulton's debt to, 235-7, 244.
 Moulton, Mrs. L. C., 252.
Mr. Midshipman Breezy, 92.
 Mt. Blanc, 120-1.
 Muirhead, J. H., Balliol, 283.
 Mulholland, Hon. H. L. (Baron Dunleath), Balliol, 287.
 Müller, Prof. Max, 192, 216, 255.
 Mumbles, reading-party at the, 38, 44, 54-5, 89, 90, 99.
 Murray, Sir James, 14 n. 1.
 Mürren, 122.
 Museum of the Royal Coll. of Surgeons, 239.
 Museum, Oxford Univ., 40, 158, 187, 226-7, 247.
 Myers, F. W. H., 204.
 Myers, W. H., Balliol, 284.
Nancy, 144 n. 4.
 Natal, Bishop of, 79.
 Natural History Museum, London, 239, 281.
Nature, 125 n. 1, 213; articles reprinted from, viii, 257-263; 263-270.
 New College, 63; Oxford's debt to, 260.
 New Forest, 120.
New History of England, etc., 221 n. 1.
New Poems, M. Arnold, 299.
 New South Wales, 170 n. 2.
 New Zealand, 207 n. 2, 215, 282.
 Newport, Isle of Wight, 120.
 Newport, Mon., 130.
Nineteenth Century, 88.
 nitrogen, excretion of, 195-6.
 'nœud vital', 197.

- Non-Collegiate Students, suggested destiny of, 270.
 Nonconformists at Oxford, 78.
 Northleach, 55.
 Nuneham, 53.
- Oakley House School, Reading, 21-3, 52, 54-5, 223-5, 242.
 'Obermann', 122.
 Odling, Prof., 199 n. 1.
 O'Donoghue, E. G., Exeter, 169.
 Ohm, Vir on the, 125.
 'On the Geographical Distribution of *Limax agrestis*', 214.
 'One word more', 33, 92.
 Orators laughed at, 158-9.
 Oriel College, 232.
Origin of Species, 87, 201-2.
 Ornithorhynchus, tongue, hair, and teeth of, 235, 237-41.
Osteology, Flower's, 188.
 Ottawa, 283.
 Ottoman Empire, 157.
 'Ouida', 140-4, 144 n. 4.
 Owen, Sir Hugh, 131.
 Owen, Sir Isambard, on Vir and the University of Wales, 302-12; help given by, viii, 129.
 Owen, S. G., Balliol and Christ Church, 286.
Oxford and Cambridge Undergraduate's Journal, 199 n. 1.
Oxford Dictionary, 208.
Oxford Magazine, 292, 293 n. 1, 299.
 Oxford, Bishop of, 79.
 Oxford, cause of 'sheep-rot' discovered at, 207-13, 315-21.
 Oxford University, benefits of College life at Cambridge and, 14, 36-7, 73, 82-4, 111, 262-4; one secret of charm of Cambridge and, 228; responsibilities of Cambridge and, 261; other University systems compared with, 111, 272-3; articles on the reform of, 257-63, 263-70; see also 123-4; certificates of Cambridge and, 251; see also 'Colleges', 'Examination system', and 'Research'.
 Oxford University Press, help given by, ix, x.
- Oxwich Bay, 55.
- Paget, Stephen, Christ Church, 178 n. 1.
 palimpsest, development, 236-7, and old age, 253, compared with a.
Pall Mall Gazette, 169 n. 2.
 Palmerston, Lord, 278.
 Palmerston Club, 49, 63.
 Pangbourne, 45.
 Paris, 269.
 Parker, Dr. W. Kitchin, Poulton's debt to, 236-41; enthusiasm of, 236-7; on the fowl's skull, 236-7; on embryology, 237; letters to Poulton, 240-1.
 Parker, Prof. W. Newton, sections of Ornithorhynchus prepared by, 238, 240.
 Parker House, Boston, Mass., 251.
 Parks, University, 205, 227.
 Paul, H. W., Corpus, at the Union, 144 n. 2, 150 n. 1, 157 n. 6.
 Peacock butterfly, 242.
 Pengelly, Joseph, 234.
 Pentrepoeth, 5.
 perorations that were spoiled, 158-9.
 Personality, the power and the danger of, 217-18, 220.
 Peterson, W. (Principal), Corpus, 48.
 Phacochoerus, 189.
 Phelps, R. L., Oriel, 292.
 Phillips, Prof. J., 41.
Philosophical Transactions, 125.
 Phylloxera, Westwood on, 202-3.
Physical Soc. Proc., 125.
Physiological Laboratory, Handbook for, 176.
 Physiology and vivisection, 176-8, 178 n. 1.
 'Phytophagic' colouring of caterpillars, 243.
 Pickering, P. S. U., Balliol, 285.
Picture of Dorian Gray, 91, 96.
 Pierpoint, R. D., help given by, v.
 Pinkerton, R. H., Balliol, 47, 286.
Pinus sylvestris, 233.
 Pitt, 37.
 Platypus, see 'Ornithorhynchus'.
 pneumothorax, 198.

- Poe, Edgar Allan, 95, 98-109.
Poems, M. Arnold, 299.
Poems by Matthew Arnold, G. C. Macaulay, 291, 300.
 'Poet-Preacher', *see* 'Jones, Thomas'.
- Poole, R. L., Balliol and Magdalen, 84 *n.* 1, 284; help given by, ix.
- Potamochoerus, 189, 189 *n.* 2.
- Potato Beetle, 175, 175 *n.* 1, 176.
- Poulton, E. B., Jesus College, autobiographical sketch of, 221-44; parents, 221-6; school, 223-5; *see also* 'Oakley House'; Scholar, x, 228-9, and Fellow, 119, of Jesus College; incidents in Oxford life of (1876-81), 32-84 (Chapters II and III); the Union and, 61-2, 167-81 (Chapter VII); the crisis of life, 233-4; debt of, to Vir, 84, 183; Rolleston, 187-9, 226, 232; Sharkey, 226-7; Prestwich, 232-3; Moseley, 234-7, 244; Parker, 236-41; Westwood, 242; Wallace, 242-4; Meldola, 243-4; Weismann, 243-4; Lankester, 244; *see also* illustrations facing 73 and 167.
- Poulton, G. S., mother of E. B., 221 *n.* 1.
- Poulton, R. W., son of E. B., 72.
- Powderhill Copse, 299.
- 'Poyser', Mrs., 142.
- Prestwich, Joseph, 39, 40, 232-3.
- Price, Bonamy, 23.
- Priestley, 180.
- Prince of Wales (King Edward VII) and Princess, the University of Wales and, 131, 310.
- 'Princess', Tennyson, 91.
- Prize-Fellowships, 260-1, 268-9; *see also* 'All Souls'.
- Proceedings of the Royal Institution*, 199 *n.* 1.
- Proceedings of the Union*, error in, 170 *n.* 3.
- Proctors, 49-52, 49 *n.* 1, 65, 264, 266-7.
- Psychology, metaphors in, the sea, 111; a 'cyst', 112; a palimpsest, 253; a crystal, 254; *see also* 32.
- Public Schools debated at the Union, 157-8; ideas of, in the early Seventies, 223-4.
- Pulling, F. S., Exeter, 144 *n.* 4.
- Punch*, 22.
- Punjab, 285.
- Pusey, Dr. E. B., 79.
- Pyrenees, 122.
- Quart. Journ. Geol. Soc.*, 200 *n.* 1.
- Quart. Journ. Micr. Sci.*, 315.
- Queen's College, 50-1, 173.
- Queen's, Provost of, 50.
- rabbits, 'fluke' and, 211.
- Radcliffe Infirmary, 205.
- Radcliffe Library, 265.
- Radnorshire, 5.
- Raleigh, T. (Sir Thomas), Balliol and All Souls, and the Union, 150 *n.* 1, 153 *n.* 1, 154 *n.* 1.
- Raleigh, Prof. Walter, 276.
- Ramsay, Alexander, 28.
- 'Raven', 104, 106.
- 'Rawjester', 92.
- Rayleigh, Lord, 125.
- Reading, 5, 21, 23-4, 52, 54-5, 90, 169, 178 *n.* 1, 188, 204, 223, 231, 233, 242; on the river at, 43, 53-4, 68, 230; walking from Oxford to, 44-5; ideas of Oxford in the Seventies at, 225.
- Ready, A. W., Wadham, and the Union, 171-2; *see also* illustration facing 167.
- 'Redia', a stage in the history of the 'liver-fluke', 318-20.
- Redlands Estate, Reading, 233, 234.
- Rees, David, of Llanelly, 6.
- 'Reform of Oxford University' (from *Nature*), 263-70; *see also* 257-63.
- regeneration, 197.
- Reichel, H. R. (Sir Harry), Balliol, 47, 132, 282; on Vir's intellect and literary power, 36-7; 85; help given by, vii.
- Rendel, Lord, 130.
- Report on Smyrna*, 219.
- Research, the encouragement of, as an academic policy, 82-3,

- 123-4; *see also* 257-79 (Chapter X); Oxford, the ideal home of, 123-4; the difficulty of the start, 82-3, 233-4, 236, 275.
- Reynolds, Sir Joshua, 247, 248.
- Rhayader, 5, 6, 57.
- Rhinoceros, 233.
- Rhys, Sir John, Principal of Jesus College, 14 *n.* 1, 119, 129 *n.* 1.
- Rigg, J. M., St. John's, 48, 163 *n.* 1; *see also* 'The Ten St. Giles', facing 73.
- Ring and the Book*, 98.
- Ripon, 286.
- Ritchie, D. G., Balliol and Jesus College, 47, 72, 283; *Shotover Papers*, and, 64; *see also* 'The Ten St. Giles', facing 73.
- Roberts, —, of Dowlais, 9.
- Roberts, W., 22.
- Rock*, 145.
- Rodd, J. Rennell (Sir James), Balliol, 287.
- Rogers, J. D., Balliol, 282.
- Rogers, L. J., Balliol, 289.
- ROLLESTON, GEORGE, viii, 40; *see* illustration facing 183; great personality of, 183-4, 189-92, 194, 217-18, 220, 226, 232; broad interests of, 184, 185, 186, 195, 199, 200; suited to political career, 186, 218; kindness to pupils, 187-9, 229; relation of to demonstrator, 229-31, and independent teacher, 231-2; humour of, 190; prejudices of, 190, 191; lectures of, 191-9, 226; characteristic sayings of, 200-1; curious timidity of, 202; intemperate temperance of, 202-4; impetuosity of, 186, 204-6; controversial style of, 206; part played in investigation of 'liver-fluke' by, 207-13; scientific writings of, 213-14; views of, on examinations, 214-17, 270-1; disappointing work of, 213-14, 218-20; illness and death of, 193, 229, 231, 234; letters of, 188-9, 215-17, 232; *see also* 'Scientific Papers and Addresses, etc.', and 'Biographical Sketch' in.
- Rolleston, Dr. H. D., help given by, viii.
- Rossetti, W. M., 165.
- 'Rot' in sheep, cause of, 207-13, 315-21.
- Round, J. H., Balliol, 284.
- Routh, Dr., 194.
- rowing, Christ Church men and, 136, 136 *n.* 2; Rolleston and, 230; Ruskin and, 244-5.
- Royal Agricultural Society, 207 *n.* 1, 208; *see also* 'Journ. Roy. Agric. Soc.'
- Royal Humane Society, 176.
- Royal Institution, 28, 199 *n.* 1.
- Royal Society, viii, 76, 240; Vir and, 125-8.
- Rücker, Sir Arthur, Brasenose, 120.
- Ruggles-Brise, E. J. (Sir Evelyn), Balliol, 286.
- Ruskin, John, voice of, 87; lectures of, 75, 87-8, 247-51; Sir W. Crookes and, 199 *n.* 1; 'The Hinksey Diggings', 244-7; *see also* illustration facing 246; on Mendelssohn, 247-9; on microscopic life, 249-51; on two certificates, 251.
- Ruskin in Oxford and other Studies*, 249 *n.* 1.
- Ruskin's Works, Library Edition*, 88, 169 *n.* 2, 247, 249 *n.* 1, 250 *n.* 1, 251 *n.* 1.
- Russell, Lord Herbrand (Duke of Bedford), Balliol, 287.
- Russell, J. W., Balliol and Merton, 71.
- Russia, 157.
- Rutherford, W. G., Balliol, 283.
- Salisbury, Lord, 153 *n.* 2.
- Sand, George, 89.
- 'Saturday Club', Boston, Mass., 251, 256.
- Savile Club, 91.
- Savoy, 110.
- Sayce, A. H., sermon of, 80-1.
- Schäfer, E. A., 240.
- 'Scientific Club', Oxford, 39.
- Scientific Papers and Addresses by George Rolleston*, 185 *n.* 1,

- 205 *n.* 1, 206 *n.* 1, 215 *n.* 1, 230 *n.* 1.
 Scotch Fir, 233.
 Scott, W., Balliol and Merton, 283.
 Seaman, Owen, 22.
 'Sensation Novels Condensed', 92.
 Seth-Smith, W. H., 22.
 Shanklin, 45.
 shark, teeth and the scales of, 238.
 Sharkey, S. J., Jesus College, Poulton's debt to, 226-7.
 sheep, 195; the cause of 'rot' in, 207-13, 315-21.
 Sheffield, 47-8, 110, 116, 289.
 Shillingford Bridge, 43, 53.
 Shipley, C. L., New College, 168.
 Shipton accident, 205.
 Shirley, W. Shirley, Balliol, at the Union and in *Vanity Fair*, 141 *n.* 3, 143 *n.* 1, 150 *n.* 2, 154 *n.* 1, 313-14.
Shotover Papers, 'Friar Tuck' in the, 64-5.
 Shrewsbury, 306, 308.
 Sichel, W. S., Balliol, 157 *n.* 4, 283.
 'Signal-elm', ix, 77, 291-301.
Sigurd the Volsung, 91.
 Simms, G., 293 *n.* 1.
 Sixt, valley of, 121.
 Sloman, A., Pembroke, at the Union, 140 *n.* 1, 144 *n.* 4, 146 *n.* 1, 152 *n.* 1, 157 *n.* 6.
 sloth, 187.
 slugs, the study of 'liver-fluke' and, 209-12.
 Smith, A. L., Balliol, help given by, vii.
 Smith, F. J., Balliol, 285.
 Smith, Goldwin, 99 *n.* 1, 218.
 Smith, Prof. H. J. S., 71, 192, 204, 273.
 Smith, Sydney, 179.
 snails, the study of 'liver-fluke' and, 209-13, 317-21.
 Snow, T. C., Corpus and St. John's, 157 *n.* 6.
 Soldan of Babylon, 88.
 Sollas, W. J., 200 *n.* 1.
 'Soul's Dream', 95-6.
 South America, 198.
 spectroscope, 243.
 Spencer, Herbert, 81-2.
 'Sporocyst', a stage in the history of the 'liver-fluke', 317-19.
 Spring, the spirit of, x, 85-6.
 Spring-Rice, C. A. (Sir Cecil), Balliol, 288.
 St. Andrews, 48, 64, 283, 286.
 St. Bartholomew's Hospital, 22.
 'St. Catherine's College', a suggestion, 270.
 St. David's College, Lampeter, 304.
 St. Giles', No. 10a, 45, 58, 72-3, 91.
 St. Helens Cottage, 92, 120.
St. James' Gazette, 286.
 St. John's College, 73.
 St. John Street, 45, 72, 74, 116.
 St. Mary's Church, 49, 51.
 St. Paul, 194, 248.
St. Paul, Myers, 204.
 St. Ursula, 87-8.
Standard, 286.
 Stanley, Dean, 79, 150.
 Stephens, H. Morse, Balliol, 287.
 Stevenson, J. F., 178 *n.* 1.
 Stirling, Antoinette, 66.
 Streatley, 44.
Studies in the Theory of Descent, 243.
 sugar and heat, 196.
 Suhm, Willemoes-, vi, 24-6, 209-10.
 Surrey, 132.
Sus, 189, 189 *n.* 2.
 Swansea, 5, 9, 17 *n.* 1, *n.* 2, *n.* 3, 21, 24, 30, 50, 54, 59, 78, 94, 113, 117.
 Swansea Literary Society, vi, 19, 20, 87, 87 *n.* 1, 94-5, 98-9; *see also* 100, 103.
 swearing, 67-9.
 Sweden, 288.
 Swinburne, A. C., 89.
 Sydney, N.S.W., 283.
 Sylvester, J., 273.
 Symonds, F., 205.
 Tatton, R. G., Balliol, 293.
 Taunt, H. W., photographs of the 'Hirksey Diggings' by, 245, 245 *n.* 1, 246 (and plate opposite), 246 *n.* 1, 247 *n.* 1.
 teeth, evolution of, 238; of *Ornithorhynchus*, 238-41.

- temperance, Rolleston on, 202-4.
 'Ten St. Giles', 49, 73.
 Tennyson, A., 2, 8, 63, 91, 164, 180, 218, 228, 254-5.
Terebratula maxillata, 40.
 Thackeray, 8.
 Theology, Oxford Faculty of, 218.
 Thomas, A. P., Balliol, 231, 282; history of 'liver-fluke' discovered by, 207-13, 315-21.
 Thomas, E. C., Trinity, 141 *n.* 1.
 Thomas, Oldfield, 189 *n.* 2.
 'Three Jews', 63-4.
 Thucydides, 158.
 Thursfield, J. R., Jesus College, 292.
 'Thyrsis', ix, 77, 123, 245 *n.* 1, 276, 291-301.
 Tilbury Docks, 175 *n.* 1.
Times, 126-8, 156, 208-9.
 'Toddie', 40.
Tom Brown's School Days, 224.
 tongue, Poulton's work on, 235-7.
 Toronto, 288.
 Tout, T. F., Balliol and Pembroke, 282.
 'Tower of Babel' &c., 96-8.
 Toynbee, Arnold, Balliol, 70, 285.
 Toynbee, P. J., Balliol, 285.
 Treasury, grant to Cardiff, 118-19.
 Trematoda, 208.
Tricotrin, 144 *n.* 4.
 Trimen, Roland, 24-6; help given by, v, vi.
 Tuckwell, Canon, 293 *n.* 1.
 Tuning-fork, Vir on the, 125.
 Turkey, 156-7.
 Turner, Sir William, 215 *n.* 1.
 Tylor, E. B., 187, 215 *n.* 1.
 Tyndall, J., 28.
 'Ulalume', 100-3; essay on, vi, 95, 98-100, 103-9.
 'Umbrella-tree', 291-301.
Under Two Flags, 140-4.
 UNION, THE, 22, 60-2, 82; help from staff of, viii; Library Committee of (1878), 62; educational influence of, 84, 183; *Vanity Fair* on, 146 *n.* 1, 151 *n.* 2, 152 *n.* 1, 153 *n.* 1, *n.* 2, 313-14.
 Chapters VI, VII, on the, 135-81.
 Introductory, 135-7; before the meeting, 137-8; the President in the chair, 139; the Librarian's list, 139-44; the Treasurer questioned, 144-8; Disestablishment, 149-51; Gladstone's retirement, 151-4; Cremation, 154-5; the Eastern Question, 60, 155-7; our Public Schools, 157-8; the Drama in Oxford, 158; Vivisection, 158, 174-81; orators who were laughed at, 158-9; the end of the Debate, 160; interruptions to Debate, 160-3; the Ladies' Gallery, 160-1; some elections, 62, 167-74, 188; the casting vote, 171-4; the Standing Committee, Lent Term, 1879, facing 167.
 University of Auckland, N.Z., 207 *n.* 2, 282.
 University of Cambridge, *see* 'Cambridge University'.
 University of Durham, 305.
 University of London, 21, 305; Vir and, 3, 24, 26-9; criticisms of the old, 24-6, 306-7.
 University of Oxford, *see* 'Oxford University'.
 University of Sheffield, *see* 'Firth College'.
 University of St. Andrews, 48, 64, 283, 286.
 University of the Cape, 25-6.
 University of Wales, 282; Vir and the, 124, 128-32; Sir Isambard Owen on Vir and, viii, 302-12; Prince and Princess of Wales, 131, 310; Gladstone, 131, 310; A. H. D. Acland and, 309.
 Univ. Coll., Aberystwyth, 131; University of Wales and, 302-12.
 Univ. Coll., Dundee, 48.
 Univ. Coll., London, 62, 70, 75, 224, 283, 285; Vir and, 3, 24, 27-9, 54, 72, 125.
 Univ. Coll., N. Wales, 131, 282; University of Wales and, 302-12.
 Univ. Coll., S. Wales and Monmouthshire, 125-6, 131, 282-3,

- 286; Balliol men under Vir at, 47; Vir appointed at, 3, 117; Gladstone's support, 118-19; Vir's work at, 113-14, 124, 128-9, 130; Cardiff Corporation induced by Vir to grant site for, 4, 132; statue of first Principal in, 133; University of Wales and, 302-12.
- Univ. Coll. School, Vir and, 23.
- Univ. Coll., Sheffield, *see* 'Firth College'.
- University systems compared, 111, 272-3.
- urea, 195, 196.
- Vanity Fair* on the Union, 146 *n.* 1, 151 *n.* 2, 152 *n.* 1, 153 *n.* 1, *n.* 2, 313-14.
- Vanity Fair*, Thackeray, 91.
- Vaughan, C. E., Balliol, 47, 74, 282; memories of Vir by, 35, 74 *n.* 2, 118; help given by, vii.
- Vaughan, Dr., Dean of Llandaff, on the Poet-Preacher and his son Vir, 117-18.
- Venis, A., *see* 'Lazarus'.
- 'Vere', *see* 'Jones, John Viriamu'.
- 'Vic.', the old Oxford theatre, 158.
- Vice-Chancellor, 158, 256; University Reform and the, 264-6.
- Victoria University, 287, 304.
- 'Vir', *see* 'Jones, John Viriamu'.
- Vivisection, Union Debate on, 158, 174-81.
- Wade, C. H., Magdalen, 168, 174.
- Walker, General, 252.
- Walker, J., Christ Church, 35.
- Wallace, A. R., 189; *see also* 189 *n.* 2; Poulton's debt to, 242-4.
- Ward, Mrs. Humphry, 293.
- Warren, T. H. (President of Magdalen), Balliol, 61, 282.
- Warwickshire, 289.
- Water Babies*, 202, 279 *n.* 1.
- 'Waterloo', 91.
- Watson, Albert, Brasenose, 300.
- Watson, W., 21-2, 28, 55, 223-4; *see also* 'Oakley House'.
- Wedderburn, A. D. O., Balliol, 285.
- Weismann, August, 81; Poulton's debt to, 243-4.
- Weldon, W. F. R., 22.
- Wells, 286.
- Welsh People*, 129 *n.* 1.
- Welsh Political and Educational Leaders in the Victorian Era*, 132 *n.* 1.
- Western Mail*, 118 *n.* 1.
- Westminster, 21, 288, 306.
- Westminster Gazette*, 21, 169 *n.* 2.
- Westminster School, 283.
- Westwood, J. O., on Phylloxera, 202-3; Poulton's debt to, 242.
- Why Paul Ferroll Killed his Wife*, 144.
- Wilde, Oscar, Magdalen, 91, 96, 108 *n.* 2.
- Wilkinson, W. H., Balliol, 285.
- Willemoes-Suhm, R. von, vi, 24-6, 209-10, 209 *n.* 1.
- Williams, John, 5.
- Williamson, A. W., 28.
- 'Willows', 99.
- Wills, J. T., Balliol, 48, 110, 121-2.
- Wills, W. A., on Vir's Alpine expeditions, 121-2.
- 'Wine', a College, 63-6.
- Winstone, of Llanwrtyd, 6.
- Wise, B. R. (Hon.), Queen's, and the Union, 170, 170 *n.* 2, 171-4; *see also* illustration facing 167.
- Woods, Mrs. Margaret L., 292, 293; help given by, ix.
- Wootton, 300.
- Wordsworth, 91, 107 *n.* 1.
- Worthing, 169, 242.
- Wytham Hill, 211, 212, 213.
- Year-Book of the Royal Society*, viii, 4.
- York, 38.
- Yorkshire, 234.
- Younger, R., Balliol, 290.
- Youngusband, R. E., Balliol, 285.
- Yunnan, 285.
- Zermatt, 122.
- Zeitsch. f. wiss. Zool.*, 209 *n.* 1.
- Zool. Anzeig.*, 210 *n.* 1, 213, 214 *n.* 1.

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Sir, 1856-1943.

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